EXHIBIT 8

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16	UNITED STATES DISTRICT COURT					
17	NORTHERN DISTRICT OF CALIFORNIA					
18	SONOS, INC.,	Case No. 3:21-cv-07559-WHA				
19	Plaintiff,	SONOS, INC.'S THIRD AMENDED COMPLAINT				
20	v.					
21	GOOGLE LLC,	DEMAND FOR JURY TRIAL				
22	Defendant.	Judge: Honorable William Alsup				
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	II					

COMPLAINT

Plaintiff Sonos, Inc. ("Sonos" or "Plaintiff") hereby asserts claims for infringement of United States Patent Nos. 9,967,615; 10,779,033; 9,344,206; 10,469,966; and 10,848,885 (the "patents-in-suit";" or "asserted patents"); attached hereto as Exhibits 1–4 and 45A-D, respectively) against Defendant Google LLC ("Google" or "Defendant"), and alleges as follows:

INTRODUCTION

- 1. Sonos is an American success story. It was founded in 2002 in Santa Barbara, California by a handful of engineers and entrepreneurs with a vision to invent the world's first wireless, whole-home audio system. At the time, popular audio systems were dependent on a centralized receiver hard-wired to each individual passive speaker throughout a home. Further, most homes with Internet access had dial-up connections, the iPhone was still five years away, and there were no streaming music services. The technological barriers confronting Sonos were enormous.
- 2. To deliver on its vision, the Sonos team completely reimagined the in-home music system as a decentralized network of smart playback devices, and it developed a platform that could seamlessly and wirelessly distribute audio room by room or throughout the home at the user's discretion. Sonos created a "choose what to play, where to play it, and how loud" wireless audio system that could not only perform without lag (e.g.) buffering, or network interruptions), but that was also so simple and intuitive that customers would make it part of their daily lives.
- 3. Commercial success did not come easy for Sonos as its vision was in many ways ahead of its time. But year by year, consumers and the entire industry came to appreciate that wireless multi-room audio devices and systems could not only work, but could become an essential part of the listening experience. Success required staying true to Sonos's disruptive vision, continuing to innovate while adjacent industries caught up and customers became more and more enamored with the idea of Sonos as they had the chance to encounter and use its products. Once Sonos had taken all the risks and placed enormous bets on research and development, the "first followers" began to copy Sonos's innovations.

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- 4. To this day, Sonos remains focused on innovations that further enhance the listening experience. Sonos invests heavily in research and development and, as a result, frequently invents new systems with new technologies, enhanced functionality, improved sound quality, and an enriched user experience.
- 5. As a result, Sonos has become one of the world's leading providers of innovative audio products. In recognition of its wide-ranging innovations, the U.S. Patent & Trademark Office has granted or allowed Sonos more than 940 U.S. patents, including the patents-in-suit, with hundreds more patents in other countries. The innovations captured by these patents cover many important aspects of wireless multi-room audio devices/systems, including, for example, how to manage and control groups of playback devices, how to facilitate seamless control and transfer of audio playback among devices, and how to output amazing sound quality.
- 6. The industry has recognized the importance of Sonos's patents. For example, Sonos earned a spot on the IPO list of "Top 300 Organizations Granted U.S. Patents" and the IEEE recognized Sonos as having one of "[t]he technology world's most valuable patent portfolios." See Exs.-6 E and 7F.
- 7. Sonos launched its first commercial products in 2005 and has since released a wide variety of critically acclaimed, patented, wireless multi-room audio products, including, for example, the Play:1, Play:3, Play:5 (Gen 1 and Gen 2), One (Gen 1 and Gen 2), One SL, Move, Playbar, Playbase, Beam, Sub, Connect, Port, Connect: Amp, Amp, Five, and Arc. See, e.g., Ex. &G. Sonos's products can be set up and controlled by the Sonos app. *Id.*
- 8. Sonos's efforts have made it incredibly popular with its customers. Sonos estimates that in fiscal year 2019, Sonos's customers listened to 7.7 billion hours of audio content using its products. And, as of September, 2019, almost two thirds of Sonos households had purchased and installed more than one Sonos product.
- 9. Sonos's record of innovation has made it the undisputed leader in what has come to be called the "multiroom audio" field. See, e.g., Ex. 9 H (2018 Digital Trends: "Sonos is the king of multiroom audio...."); Ex. 10 I (2019 What Hi-Fi: "[N]o multi-room offering is as complete or as pleasurable to live with as Sonos.").

10. Sonos has already sued Google for infringing patents on its first group of inventions involving the set-up, control, playback, and synchronization of wireless playback devices. This case involves a second group of inventions which, as described more extensively below, tackle the novel technological challenges of how to transfer playback of a stream of music from provided by a cloud-based service, from one device to another and how to create, manage, and invoke "zone scenes" to configure how multiple playback devices work together, and how to dynamically adjust the equalization of a playback device based on the environment in which the playback device is operating.

GOOGLE BEGINS INFRINGING

- 11. Almost a decade after Sonos created the smart-speaker market, Google entered the space. Initially, Google sought to work with Sonos and, through those efforts, gained access to Sonos's engineers, products, and technology. All too quickly, however, Google shifted focus and began to develop and sell products that copied Sonos's technology and infringed Sonos's patents.
- 12. Part of what makes Sonos so successful is that, through its application, Sonos is compatible with many different third-party music streaming services. When Google publicly launched its own streaming music service – Google Play Music – in late 2011, Sonos worked with Google to integrate the Google Play Music service into the Sonos ecosystem. As a result, Google Play Music launched on the Sonos platform in 2014. See, e.g., Ex. 41 J.
- This should have benefited everyone: Sonos's customers gained access to another 13. streaming service and Google Play Music users gained access to Sonos's devices. But as the press recognized at the time, Sonos's integration work with Google was especially "deep" and therefore gave Google a wide aperture through which to view Sonos's proprietary technology. *Id.* (2014 Wired: "This is the first time this sort of deep integration has happened between a third party music service and Sonos."). The copying soon followed.
- 14. Just eighteen months later, in 2015, Google began willfully infringing Sonos's patents. On information and belief, Google used the knowledge it had gleaned from Sonos to build and launch its first wireless multi-room audio product – Chromecast Audio.

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15. Google's Chromecast Audio began what has turned into Google's relentless effort to copy Sonos and use Sonos's patented technology. For example, although Google's original Chromecast Audio did not yet include Sonos's patented multi-room audio functionality, even when it was launched Google was working to add that Sonos-patented feature. See Ex. 12 K (2015 The Guardian: "Google is also working on multi-room audio streaming using the Chromecast Audio, but it will not support the popular feature out of the box."). And, when Google added the infringing feature, the press immediately noted how this "major feature update" made Google's product even more "like the ones made by Sonos:"

> Google's recently-launched Chromecast Audio adapter is getting a major feature update this week: Consumers will now be able to group multiple Chromecast audio adapters to stream their favorite music simultaneously in more than one room, similar to the multi-room support available for internet-connected loudspeakers like the ones made by Sonos.

Ex. 13 L (2015 Variety article entitled "Google's Chromecast Audio Adapter Gets Multi-Room Support Similar to Sonos"); see also Ex. 44 M (2015 Pocket-Lint) ("You control your Sonos experience with one app. Well, thanks to a new software rollout, Chromecast Audio can pretty much do the same thing.").

16. This has become a consistent pattern. Time and again, Google has added features to its products that first appeared in Sonos's products and which make use of Sonos's patented technology.

GOOGLE'S INFRINGEMENT ACCELERATES DESPITE CONTINUED NOTICE OF INFRINGEMENT

- 17. Since 2015, Google's misappropriation of Sonos's patented technology has proliferated. Google has expanded its wireless multi-room audio system to more than a dozen infringing products, including the Google Home Mini, Google Home, Google Home Max, and Pixel phones, tablets, and laptops. And Google has persisted in infringing even though Sonos has warned Google of its infringement on at least fourten separate occasions dating back to 2016.
- 18. For example, in 2016 (a year after Google launched the Chromecast Audio wireless adapter), Google released the Google Home multi-room audio player (which was

controlled by Google's rebranded multi-room controller app – the Google Home app). Unlike the Chromecast Audio, the Google Home added an internal speaker driver making it an "all-in-one" audio player akin to Sonos's prior Play:1, Play:3, and Play:5 products.

- Sonos raised the issue of infringement as to these products with Google as early as August 2016. Sonos hoped that Google would respect Sonos's intellectual property and the extensive work Sonos had put into inventing and developing its products. But Google did no such thing.
- In October On September 2, 2016, Sonos put sent John LaBarre and Allen Lo at Google on notice of infringement of 28a document identifying 24 issued Sonos patents and 4 allowed Sonos patent applications, including asserted United States ones that share a respective common specification with the '615 Patent No. 9,344,206., the '966 Patent, the '033 Patent, and the '885 Patent. Ex. BY.
- 21. On October 13, 2016, Sonos sent John LaBarre, Allen Lo, and Louis Sorell at Google, however, a document identifying 22 issued Sonos patents and 6 allowed Sonos patent applications (including ones that share a respective common specification with the '615 Patent, the '966 Patent, the '033 Patent, and the '885 Patent) and identifying relevant Google products for each. Ex. BZ.
- On October 26, 2016, Sonos sent John LaBarre at Google a PowerPoint presentation identifying 29 issued Sonos patents and 3 allowed Sonos patent applications (including ones that share a respective common specification with the '615 Patent, the '966 Patent, the '033 Patent, and the '885 Patent). Ex. CA.
- On January 31, 2018, Sonos sent Matthew Gubiotti at Google a PowerPoint 23. presentation identifying 16 issued Sonos patents and 1 allowed Sonos patent application (including ones that share a common specification with the '966 Patent and the '885 Patent), and identifying relevant Google products for each, including products accused in this case. Ex. CB.
- On July 12, 2018, Sonos sent John LaBarre and Matthew Gubiotti at Google a document identifying 58 issued Sonos patents (including ones that share a respective common

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specification with the	'615 Patent, the	'966 Patent, the	'033 Patent, and th	ie '885 Patent) and
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identifying relevant G	Google products f	for each, includir	ng products accused	l in this case. Ex. CC

- On February 22, 2019, Sonos sent Matthew Gubiotti, Bradley Riel, and Tim Kowalski at Google a letter enclosing a link to an electronic repository containing 100 claim charts detailing Google's infringement of 92 issued Sonos patents and 8 allowed Sonos patent applications (including the '615 Patent and others that share a respective common specification with the '615 Patent, the '966 Patent, the '033 Patent, and the '885 Patent). Ex. CD.
- On June 13, 2019, Sonos sent Bradley Riel and Tim Kowalski at Google a 26. PowerPoint presentation reiterating the 100 claim charts detailing Google's infringement of 92 issued Sonos patents and 8 allowed Sonos patent applications sent on February 22, 2019 and identifying 6 issued Sonos patents (including one that shares a common specification with the '966 Patent and the '885 Patent) and identifying relevant Google products for each. Ex. CE.
- On January 6, 2020, Sonos sent Bradley Riel and Tim Kowalski at Google a prefiling copy of an International Trade Commission Complaint, a U.S. District Court complaint, and claim charts detailing Google's infringement of 5 issued Sonos patents via products that are also accused in this case.
- On September 28, 2021, Sonos sent Bradley Riel and Tim Kowalski at Google a pre-filing copy of Sonos's complaint detailing Google's infringement of, inter alia, the '615, '033, and '966 Patents.
- On January 8, 2021, Sonos's counsel sent Google's counsel a copy of an amended complaint and supplemental infringement contentions detailing Google's infringement of the '885 Patent.
- 30. These instances establish that Google was, over at least a five-year period, put on repeated notice of Sonos's patents and the breadth of Sonos's patent portfolio concerning specifically the products accused in this case. At a minimum, this knowledge and repeated and persistent disclosure establishes that Google was, for some time periods, at least willfully blind to the fact that the asserted patents existed and, for other time periods, had actual knowledge of the existence of the asserted patents. Further, this knowledge and repeated and persistent disclosure

1	establishes that Google, for some time periods, had at least failed to investigate whether it		
2	infringed the asserted patents despite the existence of a high risk of infringement and, for other		
3	time periods, had actual knowledge of a credible and specific allegation of infringement of the		
4	asserted patents. In this way, Google was or at least should have been aware of each of the		
5	asserted patents starting from at least their respective dates of issuance and of its infringement		
6	thereof.		
7	20.31. Despite this consistent and repeated notice, Google did not stop infringing.		
8	Instead, it doubled down and introduced new infringing products, making use of even more		
9	patented technology from Sonos.		
10	21.32. For example, in 2017, eight years after Sonos introduced its first all-in-one audio		
11	player – the Play:5 – Google released its first all-in-one audio players – the Google Home Max		
12	and the Google Home Mini. Google's Home Max in particular was seen as a "Sonos Clone" and		
13	a "not-so-subtle copy of the [Sonos] Play:5 speaker" Ex. 15 N. As explained by Gizmodo,		
14	"[i]t's also hard not to see the [Google Home Max] device as something of a jab at Sonos." <i>Id.</i> ;		
15	see also, e.g., Ex. 16 0 (2017 Android Central: "You can't help but look at Google Home Max		
16	and come to the conclusion that Google is sticking its nose where Sonos has been for years.").		
17	22.33. Then again, in February 2019, Sonos put Google on notice of infringement of 100		
18	Sonos patents, including asserted United States Patent No. 9,967,615.		
19	23.34. Nothing Sonos did, however, deterred Google from expanding its infringement.		
20	Google's infringing product line now includes at least the Chromecast, Chromecast Ultra,		
21	Chromecast Audio, Chromecast with Google TV, Home Mini, Nest Mini, Home, Home Max,		
22	Home Hub, Nest Hub, Nest Hub Max, Nest Audio, and Nest Wifi Point (individually or		
23	collectively, "Google Audio Player(s)" or "Cast-enabled media player(s)"), all of which can be		
24	controlled by, for example, the YouTube Music app, the Google Play Music app, the YouTube		
25	app, and the Google Home app (individually or collectively, "Google App(s)"). See, e.g., Exs.		
26	17-27. <u>P-Z.</u>		
27	24.35. In addition to providing the Google Apps for controlling the Google Audio		
28	Players, Google also offers various infringing hardware controllers that are pre-installed with the		

Google Play Music app, YouTube app, and/or YouTube Music app (and capable of downloading and executing the Google Apps that are not pre-installed). These infringing hardware controllers include, for example, Google's "Pixel" phones, tablets, and laptops (*e.g.*, the Pixel 3, Pixel 3 XL, Pixel 3a, Pixel 3a XL, Pixel 4, Pixel 4 XL, and Pixel 4a phones, the Pixel Slate tablet, and the Pixelbook and Pixelbook Go laptops) (individually or collectively, "Google Pixel Device(s)"). *See, e.g.*, Exs. 28–32 AA-AE.

25.36. Herein, "Google Wireless Audio System" refers to one or more Google Audio Players, one or more Google Pixel Devices, and/or one or more Google Apps.

26.37. In order to hold Google accountable for its willful infringement of Sonos's patents, Sonos filed a complaint in January 2020 asking the United States International Trade Commission ("ITC") to institute an investigation into Google's unlawful importation into and sale in the United States of infringing products. The ITC instituted an investigation, In re Certain Audio Players and Controllers, Components Thereof, and Products Containing Same, Inv. No. 337-TA-1191, to determine whether Google's audio players and controllers infringe five Sonos patents directed to fundamental features such as playing music on multiple speakers in synchrony, playing music in stereo over two or more players, a controller that can easily setup a player on a wireless network, and playback-control features such as controlling both the volume of individual speakers and a group of speakers.

27.38. While the ITC Investigation has been pending, Google has continued to increase its infringement. For example, press reports indicate that Google is introducing new products and changes that mean Google is "one step closer to replacing your Sonos system." Ex. 33 AF; see also Ex. 44 AP ("The new functionality appears to be the most direct challenge to the likes of Sonos, which has enjoyed enormous success by creating a series of connected speakers and soundbars that can play music simultaneously – or individually."). The press has similarly noted that Google's new speaker "could be a new rival for the likes of the Sonos One, the best smart speaker you can buy in 2020." Ex. 34 AG; see also Ex. 44 AP ("Just like Sonos, you can also change the volume on each speaker individually from the main interface."). And press reports indicate that Google has expanded its use of Sonos's stereo pair technology into the new smart-

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27 28 speakers even though Google is currently being sued for infringing a Sonos patent on this technology. Exs. 35, 44 AH, AP.

28.39. Google itself has also highlighted the importance of its use of Sonos's technology. For example, Google's Chris Chan publicly stated that "[c]ontrolling the audio throughout my home, no matter who's listening, has been incredibly helpful" and that "[t]oday, we're expanding that control. You can already manually group Nest devices in order to play the same music on various speakers at the same time, and now we're launching multi-room control so you can dynamically group multiple cast-enabled Nest devices (speakers, Smart Displays, Chromecasts) in real-time to fill multiple rooms with music." Ex. 35 AH; see also Ex. 44 AP. Again, Google has expanded its use of this technology while it is being sued for infringing Sonos's patents on this precise technology.

29.40. Google's aggressive and deliberate expansion of its use of Sonos's patented technology has led observers to conclude that "[n]o market is safe from [the] search engine monster" and that Google was specifically "offering new products to compete with Sonos in the music streaming market." See Ex. 36 AI.

GOOGLE'S CONTINUED INFRINGEMENT FORCES THIS SUIT

30.41. In the face of Google's unrelenting infringement, Sonos has no choice but to bring this suit. In this action, Sonos asserts patents that are not at issue in the ITC or the related district court action. Sonos is also accusing Google's Wireless Audio System of infringing different patented features than are at issue in either of those actions.

31.42. Sonos's ITC suit addressed Google's infringement of Sonos patents covering fundamental aspects of wireless, whole-home audio systems. While groundbreaking, those patents represent only some of Sonos's ongoing innovation from its inception to today. Through its foresight, substantial investment, and relentless pursuit of excellence, Sonos built on its previous success and invented a number of key features consumers have grown to expect and demand in streaming music listening.

32.43. For example, as explained more fully below, Sonos's U.S. Patent Nos. 9,967,615 and 10,779,033 (the "615 Patent" and the "033 Patent," respectively) cover key aspects of

Sonos's inventive approach for streaming music from a cloud-based service to a media playback system, including technology for transferring playback responsibility for a cloud-based stream of media content from a user's device, such as a smart phone, to a media playback system that is then configured to retrieve and play back the cloud-based media content.

33.44. Sonos was well ahead of the field when it began to develop these inventions in 2011. At that time, Sonos's audio system, including its smart-phone app controller, was in a category all its own. Moreover, streaming content from cloud-based media services for playback by computers – let alone other types of networked devices like smart phones and smart speakers – was in its infancy. Nonetheless, at a time years before Google released its first Chromecast product, Sonos envisioned a novel experience of continuous and intuitive control of a user's entire streaming listening experience, across multiple networked devices, including smart phones and/or smart speakers. That vision gave rise to the innovation of technology for enabling seamless transition of playback responsibility for cloud-based media content between different networked devices, such as a smart phone and a smart speaker. This paradigm is now fundamental across the entire streaming industry as user expectations of continuous listening experiences have continued to converge with Sonos's vision.

34.45. Similarly, Sonos's U.S. Patent Nos. 9,344,206, 10,469,966, and 10,848,885 (the "206 Patent," the "966 Patent," and "the '885 Patent," respectively) cover some of Sonos's inventions related to creating, managing, and invoking "zone scenes" to configure how multiple players work together. With these patents, Sonos once again anticipated what consumers would want and invented a new feature for its system. Using the inventions of the '206,'966, and '885 Patents, playback devices can be grouped together for synchronous playback in an easy and intuitive manner using "zone scenes." Advantageously, such a "zone scene" can be accessed and invoked by multiple devices and in various ways (e.g., by voice) even when the particular controller that created the "zone scene" is not on the network.

35.46. Sonos provided a pre-filing copy of both the original complaint and this Sonos's First Amended Complaint to Google, thereby providing clear pre-suit notice of infringement of the patents-in-suit. Google, however, has never given any indication that it is willing to stop

infringing, and did not do so in response to receiving a draft of either the original complaint or thisthe First Amended Complaint.

36.47. On information and belief, Google is unwilling to stop infringing because its infringement of Sonos's patented inventions has paved the way for Google to generate billions of dollars in revenue. A December 2018 market report by Royal Bank of Canada ("RBC"), for example, concluded that Google sold over 40 million Google Home devices in the U.S. and that Google generated \$3.4 billion in Google Home revenue in 2018 alone. Ex. 37 AJ at pp. 1, 4, 14-15. RBC also found that, as of August 2017, Google had sold more than 55 million Chromecast devices and that Google generated almost \$1 billion in Chromecast revenue in 2018. *Id.* at pp. 4,16, 18. Further, RBC estimated that, in 2018, Google generated \$3.4 billion in Pixel device revenue. *Id.* at pp. 4, 8.

37.48. By 2021, RBC estimates that Google will be annually selling over 100 million Google Home devices in the U.S. and generating over \$8 billion in Google Home revenue. *Id.* at pp. 4, 14-15. In addition, by 2021, RBC estimates that Google will annually generate \$2.4 billion in Chromecast revenue and nearly \$7 billion in Pixel device revenue. *Id.* at pp. 4, 8, 18.

38.49. The revenue obtained from the sale of Google's hardware devices vastly understates the value to Google of infringing Sonos's patents. On information and belief, Google is intentionally selling the infringing products at a discount and/or as a "loss leader" with the expectation that this will allow Google to generate even more revenue in the future – e.g., by powering Google's continued dominance of the market for search advertising. In particular, Google's infringement of Sonos's patented inventions has helped and/or will help Google generate significant revenue from the use of Google's hardware devices including advertising, data collection, and search via the Google Wireless Audio Systems. As the *New York Post* explained, "Amazon and Google both discounted their home speakers so deeply over the holidays that they likely lost a few dollars per unit ... hoping to lock in customers and profit from later sales of goods and data about buying habits." Ex. 38 AK. Similarly, *News Without Borders* explained that companies like Google are using their "smart speaker" devices as "loss leader[s]' to support advertising or e-commerce." Ex. 39- AL.

39.50. On information and belief, Google's copying of Sonos's patented inventions has also helped and/or will help Google generate significant revenue from driving its users to make purchases such as streaming music subscriptions and retail purchases via the Google Wireless Audio Systems. For example, an NPR "smart speaker" survey found that 28% of survey respondents agreed that "[g]etting [a] Smart Speaker led [them] to pay for a music service subscription," and Google offersoffered at the time two such subscriptions – Google Play Music and YouTube Music. Ex.40 AM at p. 20. Likewise, the NPR survey also found that 26% of respondents use their smart speakers "regularly" to "add [items] to shopping list." *Id.* at p. 14; *see also*, *e.g.*, Ex.39 AL (stating that companies like Google are using their "smart speaker" devices as "loss leader[s]' to support... e-commerce.").

40.51. On information and belief, Google is willfully infringing Sonos's patents as part of Google's calculated strategy to vacuum up invaluable consumer data from users and, thus, further entrench the Google platform among its users and fuel its dominant advertising and search platforms.

41.52. Google's infringement – and its strategy to sell its infringing products at a loss to develop alternative revenue streams – has caused significant damage to Sonos. For example, the Google Home Mini predatorily implemented Sonos's valuable patented technology into an all-inone wireless multi-room product that Google sells at a highly subsidized price point or even gives away for free. Ex.41 AN ("At \$49, Google Home Mini works on its own or you can have a few around the house, giving you the power of Google anywhere in your home."); Ex.39 AL ("Google partnered with Spotify to offer Home Minis as a free promotion for Spotify Premium customers. Spotify's premium userbase is nearly 90 million, so if even a fraction of users take the free offer, a massive influx of Google smart speakers will enter the market.").

ADDITIONAL FACTS ESTABLISH THAT GOOGLE'S INFRINGEMENT HAS BEEN AND CONTINUES TO BE WILLFUL

53. In addition to the facts above, additional facts establish that Google had actual knowledge of the asserted patents and knowledge of its infringement thereof prior to the filing of this amended complaint. To the extent required, Google had this prior knowledge with sufficient

concerning the operation of the accused products, (ii) reviewed the specifications, claims, and file 1 2 histories of the asserted patents, and (iii) compared the operation of the accused products to the 3 claims of the asserted patents and allegedly concluded that, for one or more reasons, the accused 4 products did not, according to Google, practice one or more elements of the asserted claims. 5 In order to have conducted this investigation and to have formed a reasonable 6 belief as to Google's alleged non-infringement of the asserted patents in time for its filing on 7 September 28, 2020, Google was conducting its investigation days, weeks, or months prior to 8 September 28, 2020. Accordingly, Google had pre-suit knowledge of the asserted patents and 9 pre-suit knowledge of its infringement thereof well before September 28, 2020. This pre-suit 10 knowledge was the result of Google's own investigation that it conducted to support its DJ action. 11 In the alternative, and to the extent that Google first learned of the '966 and '033 12 Patents on September 28, 2020 when Sonos provided a pre-filing draft Complaint to Google, and 13 to the extent Google first learned of the '885 Patent on January 8, 2021 when Sonos provided a 14 draft pre-filing amended Complaint and supplemental infringement contentions to Google, the 15 time between learning of the asserted patents and filing its DJ action was nevertheless a sufficient 16 time for Google to have conducted its investigation and thus learned of the asserted patents and 17 its alleged infringement thereof. Despite the difference between receiving Sonos's notice and 18 filing its DJ action being mere hours (which illustrates the implausibility of Sonos's letter being 19 the initial notice to Google), Google nevertheless took action right away to (i) confer with Google 20 engineers concerning the operation of the accused products, (ii) review the specifications, claims, and file histories of the asserted patents, and (iii) compare the operation of the accused products 21 22 to the claims of the asserted patents and allegedly conclude that, for one or more reasons, the 23 accused products, according to Google, did not practice one or more elements of the asserted 24 claims. See Dkt. 27-3 at 3 ("[U]pon receiving Sonos's letter, Google investigated Sonos' 25 allegations, determined that it had a Rule 11 basis for non-infringement, and filed the instant 26 declaratory judgment action."). Accordingly, Google had pre-suit knowledge of the asserted 27 patents and pre-suit knowledge of its infringement thereof before Sonos initiated this suit on 28 September 29, 2020. This pre-suit knowledge was the result of both Sonos's pre-suit draft

Complaint detailing Google's infringement of the '966, '615, and '033 Patents, as well as Google's own investigation that it conducted to support its DJ action.

- 62. Moreover, because Google had sufficient time to prepare and file its DJ action,
 Google also had time to take steps to begin avoiding infringement. However, on information and belief, Google took no such steps between the time that it learned of its infringement and filed its DJ action.
- 63. In either case, as a result of Google's own investigation to support the factual allegations it levied in its DJ action, Google learned of the asserted patents and learned of its alleged infringement thereof. This investigation gave Google sufficient time to assess the asserted patents, assess the accused products, and determine whether it would cease its allegedly infringing activity. Rather than cease its infringing activity, switch to an alternate design, or request to Sonos that Google ought to be given more time to do the above, Google chose to continue to make, use, sell, offer for sale, and import the accused products and thus, to continue its allegedly infringing activity, despite its knowledge of the asserted patents and its knowledge of its alleged infringement thereof.
- 64. Finally, Google's infringement since the initial filing of this action on September 29, 2020 has been willful. Sonos's initial complaint set forth detailed infringement allegations demonstrating how each of the accused products meets each and every element of the asserted claims. Over the course of the case, Sonos's infringement allegations have only further crystalized, as evidenced by the various infringement contentions that Sonos served Google with on December 11, 2020, February 17, 2021, June 4, 2021, July 14, 2021, September 10, 2021, October 21, 2021, January 20, 2022, February 7, 2022, March 2, 2022, and March 18, 2022. These infringement contentions include citations to Google's own documents demonstrating that the products practice the claim elements. They also include pin-cites to Google's source code illustrating where and how the infringing functionality takes place, as well as narrative descriptions of how the accused products engage in infringing functionality. When Google advanced multiple different and conflicting constructions of certain claim terms, Sonos revised its infringement contentions to illustrate how Google still infringed even under Google's incorrect

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interpretations of these claim terms. Despite this, Google has not changed the design or operation of the accused products since these products were accused of practicing the asserted claims. On information and belief, Google has not undertaken any effort to investigate or even attempt in good faith to change the functionality of the accused products to a design that would arguably not infringe.

Nor has Google at any point to-date presented an articulable non-infringement or invalidity position. Sonos has asked for Google's non-infringement positions via interrogatory. On September 7, 2021, Google answered only with a bald assertion that Sonos has not established infringement and, for each asserted independent claim, a conclusory statement that Google does not practice each and every claim element. Similarly, although a good faith belief in invalidity should not act as a defense to a claim of willful infringement, Google's invalidity contentions served pursuant to the local patent rules of this Court contain no explanation of its alleged invalidity positions. For instance, as Sonos has already pointed out to Google, Google's prior art charts are merely block quotes of large portions of its cited references with no explanation whatsoever as to how or why the quoted portions meet the elements of the asserted claims, especially under Google's own constructions of various claim elements. Google has declined to address these deficiencies even after Sonos pointed them out to Google. Accordingly, Google's infringement of the asserted patents has been and remains willful since at least the day this suit began (and every day thereafter) because Google has no reasonable non-infringement or invalidity defense.

THE PARTIES

42.66. Plaintiff Sonos, Inc. is a Delaware corporation with its principal place of business at 614 Chapala Street, Santa Barbara, California 93101. Sonos is the owner of the patents-in-suit. Sonos holds all substantial rights, title, and interest in and to the Asserted Patents patents in-suit. 43.67. Defendant-Google LLC is a Delaware limited liability corporation with its

principal place of business at 1600 Amphitheatre Parkway, Mountain View, CA 94043. Google maintains a physical address in this district at 500 West 2nd Street, Austin, Texas, 78701. Google may be served with process through its registered agent, the Corporation Service Company, at

211 East 7th Street, Suite 620, Austin Texas 78701. Google is registered to do business in the State of Texas and has been since at least November 17, 2006. 94043.

44.68. Google LLC is one of the largest technology companies in the world and conducts product development, engineering, sales, and online retail, search, and advertising operations in this District.

45.69. Google LLC directly and/or indirectly develops, designs, manufactures, distributes, markets, offers to sell, sells, and/or imports the infringing Google Wireless Audio System at issue in this litigation in/into the United States, including in the Western District of Texasthis judicial district, and otherwise purposefully directs infringing activities to this District in connection with its Google Wireless Audio System.

JURISDICTION AND VENUE

46.70. This action for patent infringement arises under the Patent Laws of the United States, 35 U.S.C. § 1 et. seq. This Court has original jurisdiction under 28 U.S.C. §§ 1331 and 1338.

47-71. This Court has personal jurisdiction over Google because, pursuant to Fed. R. Civ. P. 11(b)(3), Google has: (1) availed itself of the rights and benefits of the laws of the State of TexasCalifornia, (2) transacted, conducted, and/or solicited business and engaged in a persistent course of conduct in the State of TexasCalifornia (and in this District), (3) derived substantial revenue from the sales and/or use of products, such as the infringing Google Wireless Audio System, in the State of TexasCalifornia (and in this District), (4) purposefully directed activities (directly and/or through intermediaries), such as shipping, distributing, offering for sale, selling, and/or advertising its infringing Google Wireless Audio System, at residents of the State of TexasCalifornia (and residents in this District), (5) delivered its infringing Google Wireless Audio System into the stream of commerce with the expectation that the Google Wireless Audio System will be used and/or purchased by consumers, and (6) committed acts of patent infringement in the State of TexasCalifornia (and in this District).

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48.72. This Court also has personal jurisdiction over Google because it is registered to do business in the State of TexasCalifornia and has one or more regular and established places of business in the Western District of Texasthis judicial district.

49.73. Venue is proper in this District under the provisions of 28 U.S.C. § 1400(b) because, as noted above, Google has committed acts of infringement in this district and has one or more regular and established places of business in this district. Google has also repeatedly admitted that venue is proper in this District for various patent cases. See e.g., Solas OLED Ltd. v. Google, Inc. (WDTX Case No. 6-19 ev 00515) and VideoShare, LLC v. Google LLC et al (WDTX Case No. 6-19 ev 00663).

THE PATENTS-IN-SUIT

U.S. Patent No. 9,967,615

50.74. Sonos is the owner of U.S. Patent No. 9,967,615 (the "'615 Patent"), entitled "Networked Music Playback," which was duly and legally issued by the United States Patent and Trademark Office ("USPTO") on May 8, 2018. A copy of the '615 Patent, is attached hereto as Exhibit—1.—A.

51.75. The '615 Patent relates generally to technology for facilitating transfer of playback responsibility from a user's device to a media playback system.

52.76. The '615 Patent recognized that "[t]echnological advancements have increased the accessibility of music content, as well as other types of media...." '615 Patent at 1:19-20. This allowed users to access audio and video content over the Internet. *Id.* at 1:21-26.

53.77. But, the '615 Patent identified a particular problem and provided an unconventional technological solution. Specifically, the patent recognized that "[w]ired or wireless networks can be used to connect one or more multimedia playback devices for a home or other location playback network (*e.g.*, a home music system)." '615 Patent at 1:66-2:2. This means that "[m]usic and/or other multimedia content can be shared among devices and/or groups of devices (also referred to herein as zones) associated with a playback network." *Id.* at 2:6-9. The '615 Patent is directed to a method, tangible media, and controller that "facilitate streaming or otherwise providing music from a music-playing application (*e.g.*, browser-based application,

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native music player, other multimedia application, and so on) to a multimedia content playback (*e.g.*, SonosTM) system." *Id.* at 2:10-14.

54.78. The '615 Patent provides an unconventional technological solution to this problem. For example, the '615 Patent describes an "Example Controller" that "can be used to facilitate the control of multi-media applications...." '615 Patent at 9:8-14. "In particular, the controller 500 is configured to facilitate a selection of a plurality of audio sources available on the network and enable control of one or more zone players ... through a wireless network interface 508." *Id.* at 9:14-18. Further, the '615 Patent describes embodiments that "enable a user to stream music from a music-playing application (e.g., browser-based application, native music player, other multimedia application and so on) to a local multimedia content playback (e.g., SonosTM) system." '615 Patent at 12:8-12. More specifically, the '615 Patent teaches that while "a user listens to a third party music application (e.g., PandoraTM RhapsodyTM, SpotifyTM, PandoraTM RhapsodyTM, SpotifyTM, and so on)" on a user device, such as the user's "smart phone," the user can "select[] an option to continue playing [the current] channel on her household music playback system (e.g., SonosTM)," which will cause the user's "playback system" to "pick[] up from the same spot on the selected channel that was on her phone and output[] that content (e.g., that song) on speakers and/or other playback devices connected to the household playback system." *Id.* at 12:44-53; see also id. at 13:1-53.

55.79. The '615 Patent goes on to teach specific technology for facilitating this transfer of playback responsibility from the user's device to the user's playback system. For instance, the '615 Patent teaches that one aspect of this technology involves causing data for retrieving network-based media content (such as a uniform resource locator (URI)) to be passed to a playback device in the playback system so that the playback device can "run on its own to fetch the content" from a networked audio source, such as a "cloud" server that is accessible over the Internet. *Id.* at 12:53-63; *see also id.* at 12:63-67 (describing that "[a] third party application can open or utilize an application programming interface (API) to pass music to the household playback system without tight coupling to that household playback system"); 15:47-16:19 (describing a "throw it over the wall" approach in which "a third party application provides a

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multimedia playback device (e.g., a SonosTM zone player (ZP)) with enough information about content (e.g., an audio track) so that . . . the local playback system (e.g., SonosNetTM) can directly access a source of the content and . . . play the content directly off the network (e.g., the Internet) or cloud," where the "connection between the third-party application and the local playback device (e.g., Sonos ZonePlayerTM) can be direct over a local area network (LAN)" or "remote through a proxy server in the cloud"); 16:53-17:4 (describing various embodiments for "queue management" associated with the transfer of playback from a control device to a playback system, including an embodiment where a "shared queue is provided between the local playback system and the third party application to keep the local system and the application synchronized"). Further, the '615 Patent teaches that another aspect of this technology involves transitioning the user's device into a mode in which it functions to control the playback of the media content by the user's playback system after the transfer. *Id.* at 16:20-42, 17:5-20. In this way, the technology taught by the '615 Patent provides for intuitive and seamless transfer of playback responsibility from a user's device to a media playback system.

56.80. In line with these teachings, the '615 Patent claims devices, computer-readable media, and methods for facilitating transfer of playback responsibility from a user's device to a media playback system.

57.81. For example, claim 13 of the '615 Patent recites a non-transitory computer readable storage medium including instructions for execution by a processor that, when executed, cause a control device to perform various functions that facilitate transfer of playback responsibility from the device to a media playback system. See '615 Patent, claim 13. When the instructions are executed, the control device is initially operable to (i) cause a graphical interface to display a control interface including one or more transport controls to control playback by the control device, (ii) identify playback devices connected to a local area network, (iii) cause the graphical interface to display a selectable option for transferring playback from the control device, and (iv) detect a set of inputs to transfer playback from the control device to a particular playback device. *Id.* Additionally, the instructions configure the control device so that, after detecting the set of inputs to transfer playback from the control device to the particular playback

device, the control device is operable to cause playback to be transferred from the control device to the particular playback device by (a) causing one or more first cloud servers to add multimedia content to a local playback queue on the particular playback device, wherein adding the multimedia content to the local playback queue comprises the one or more first cloud servers adding, to the local playback queue, one or more resource locators corresponding to respective locations of the multimedia content at one or more second cloud servers of a streaming content service, (b) causing playback at the control device to be stopped, and (c) modifying the one or more transport controls of the control interface to control playback by the playback device. *Id*. Additionally yet, the instructions configure the control device so that the control device is operable to cause the particular playback device to play back the multimedia content, which involves the particular playback device retrieving the multimedia content from one or more second cloud servers of a streaming content service and playing back the retrieved multimedia content. *Id*.

U.S. Patent No. 10,779,033

58.82. Sonos is the owner of U.S. Patent No. 10,779,033 (the "'033 Patent"), entitled "Systems And Methods For Networked Music Playback," which was duly and legally issued by the United States Patent and Trademark Office ("USPTO") on September 15, 2020. A copy of the '966 Patent, is attached hereto as Exhibit—2.—B.

59.83. The '033 Patent is related to the '615 Patent in that they are both continuations of application No. 13/341,237, filed on December 30, 2011, now U.S. Patent No. 9,654,821. Thus, the '033 and '615 Patents share essentially the same specification. Sonos incorporates by reference and re-alleges paragraphs 52-58 of this Amended Complaint as if fully set forth herein.

60.84. Like the '615 Patent, the '033 Patent claims devices, computer-readable media, and methods for facilitating transfer of playback responsibility from a user's device to a media playback system, which provide an unconventional solution to the technological problem described in the '615 Patent.

61.85. For example, claim 1 of the '033 Patent recites a computing device with specific hardware configurations, including a non-transitory computer-readable medium that stores

program instruction that can be executed by the device's processor(s). See '033 Patent, claim 1. transferred from the computing device to the at least one given playback device, and then after detecting the indication, transition from (a) the first mode in which the computing device is configured for playback of the remote playback queue to (b) a second mode in which the computing device is configured to control the at least one given playback device's playback of the remote playback queue and the computing device is no longer configured for playback of the

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When the instructions are executed, the computing device can initially operate in a first mode in which it is configured for playback of a remote playback queue provided by a cloud-based computing system associated with a cloud-based media service. *Id.* In that mode, the computing device is operable to (i) display a representation of one or more playback devices in a media playback system that are communicatively coupled to the computing device over a data network and available to accept playback responsibility for the remote playback queue, and (ii) while displaying the representation of the one or more playback devices, receive user input indicating a selection of at least one given playback device from the one or more playback devices. *Id.* Additionally, the instructions configure the computing device so that, based on receiving the user input, the computing device is operable to transmit an instruction for the at least one given playback device to take over responsibility for playback of the remote playback queue from the computing device, wherein the instruction configures the at least one given playback device to (i) communicate with the cloud-based computing system in order to obtain data identifying a next one or more media items that are in the remote playback queue, (ii) use the obtained data to retrieve at least one media item in the remote playback queue from the cloud-based media service; and (iii) play back the retrieved at least one media item. *Id.* Additionally yet, the instructions configure the computing device so that the computing device is operable to detect an indication that playback responsibility for the remote playback queue has been successfully

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remote playback queue. Id.

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27 28 U.S. Patent No. 9,344,206 10,469,966

62.86. Sonos is the owner of U.S. Patent No. 9,344,206 10,469,966 (the "206'966") Patent"), entitled "Method And Apparatus For Updating Zone Configurations In A Multi-Zone

SystemScene Management," which was duly and legally issued by the United States Patent and Trademark Office ("USPTO") on May 17, 2016. November 5, 2019. A copy of the '206'966 Patent, is attached hereto as Exhibit-3. C.

63.87. The '206'966 Patent relates generally to consumer electronics and human-computer interaction and, more specifically, to controlling or manipulating a plurality of multimedia players in a multi-zone system. *See, e.g.*, '206'966 Patent at 1:25-2930-34.

64.88. The '206'966 Patent recognized that users demand not only quality audio reproduction but also a system that allows multiple players to access music from different sources. '206'966 Patent at 1:30-4035-45. Before the '206'966 Patent, a conventional multizone audio system might include a number of audio sources, but each audio source had to be connected to its own amplifier and a set of speakers and was typically installed in one place. *Id.* at 1:40-4446-50. This had inherent limitations. "In order to play an audio source at one location, the audio source must be provided locally or from a centralized location. When the audio source is provided locally, the multi-zone audio system functions as a collection of many stereo systems, making source sharing difficult. When the audio source is provided centrally, the centralized location may include a juke box, many compact discs, an AM or FM radio, tapes, or others. To send an audio source to an audio player demanding such source, a cross-bar type of device is used to prevent the audio source from going to other audio players that may be playing other audio sources." *Id.* at 1:44-4450-61.

65.89. Moreover, as the '206'966 Patent recognized, "[i]n order to achieve playing different audio sources in different audio players, the traditional multi-zone audio system is generally either hard-wired or controlled by a pre-configured and pre-programmed controller." '206'966 Patent at 1:56-5962-65. Such a system created problems. "While the pre-programmed configuration may be satisfactory in one situation, it may not be suitable for another situation. For example, a person would like to listen to broadcast news from his/her favorite radio station in a bedroom, a bathroom and a den while preparing to go to work in the morning. The same person may wish to listen in the den and the living room to music from a compact disc in the evening. In order to satisfy such requirements, two groups of audio players must be

established. In the morning, the audio players in the bedroom, the bathroom and the den need to be grouped for the broadcast news. In the evening, the audio players in the den and the living room are grouped for the music. Over the weekend, the audio players in the den, the living room, and a kitchen are grouped for party music. Because the morning group, the evening group and the weekend group contain the den, it can be difficult for the traditional system to accommodate the requirement of dynamically managing the ad hoc creation and deletion of groups." Id. at 1:5965-2:1017. 66.90. Thus, the '206'966 Patent recognized "a need for dynamic control of the audio players as a group" and a system in which "the audio players may be readily grouped." '206'966

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Patent at 2:11-13. The invention of the '206'966 Patent would, thus, overcome the problems "in a traditional multi-zone audio system [where] the audio players have to be adjusted one at a time, resulting in an inconvenient and non-homogenous audio environment." *Id.* at 2:13-1618-20. 67.91. The 206'966 Patent provided an unconventional solution to this technological problem. "In general, the present invention pertains to controlling a plurality of multimedia players, or simply players, in groups." '206'966 Patent at 2:28 2936-37. One specific aspect of the grouping technology that is taught by the '206'966 Patent involves a controller with a user interface that permits a user to configure and save a "zone scene," which may comprise a "predefined" grouping of zone players that can later be "activated" (or "invoked") in order to group the zone players in the "zone scene" together for synchronous playback. *Id.* at 2:30-53, 2:60-38-61, 3:41-12, 8:19-10:4542-11:11. The '206'966 Patent explains that this "zone scene" technology for grouping zone players together for synchronous playback provides improvements over the existing technology for grouping zone players together for synchronous playback, which involved defining the group membership at the time that the group was to be invoked – particularly in situations where a larger number of zone players are to be grouped together for synchronous playback. *Id.* at 8:19-5542-9:15. For instance, the benefits highlighted by the '206'966 Patent include (i) allowing a group of zone players to be "predefined" as part of a "zone scene" so that the group's membership need not be defined at the time that the group is to be invoked, (ii) allowing a predefined group to be invoked without requiring the zone players in

the group to be separated from other groups beforehand, and (iii) allowing zone players to exist as part of multiple different predefined groups that can be invoked in order to dynamically group the zone players for synchronous playback. *Id.* at 8:19-10:4542-11:11.

1. In line with these teachings, the '206 Patent claims devices, computer readable media, and methods for managing and using "zone scenes" to facilitate grouping of zone players. For example, claim 1 of the '206 Patent recites a "multimedia controller including a processor" that is configured to (i) receive, via a network interface, a zone configuration from a first independent playback device of a plurality of independent playback devices, wherein the zone configuration is configured via the controller and maintained at the first independent playback device, and wherein the zone configuration characterizes one or more zone scenes, each zone scene identifying a group configuration associated with two or more of the plurality of independent playback devices, and (ii) cause a selectable indication of the received zone configuration to be displayed, wherein the displayed selectable indication is selectable to cause one or more of the zone scenes to be invoked by two or more of the plurality of independent playback devices. See '206 Patent, claim 1.

<u>U.S. Patent No. 10,469,966</u>

2. Sonos is the owner of U.S. Patent No. 10,469,966 (the "'966 Patent"), entitled "Zone Scene Management," which was duly and legally issued by the United States Patent and Trademark Office ("USPTO") on November 5, 2019. A copy of the '966 Patent, is attached hereto as Exhibit 4.

3. The '966 Patent is related to the '206 Patent in that they are both continuations of application No. 13/896,829, filed on May 17, 2013, now U.S. Patent No. 8,843,228. Thus, the '966 and '206 Patents share essentially the same specification. Sonos incorporates by reference and re-alleges paragraphs 64-69 of this Amended Complaint as if fully set forth herein.

68.92. The '906In line with these teachings, the '966 Patent claims devices, computer-readable media, and methods for managing and using "zone scenes" to facilitate grouping of zone players, which provides an unconventional solution to the technological problems related to grouping zone players that are described in the '906'966 Patent.

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69.93. For example, claim 1 of the '966 Patent describes a computing device with a processor that can execute instructions stored in the computing device's non-transitory, computer -readable medium. Those instructions, when executed, cause the computing device to be operable to (i) receive a first request to create a first zone scene comprising a first predetermined grouping of zone players that are to be configured for synchronous playback when the first zone scene is invoked, and (ii) based on the first request, cause creation of the first zone scene, cause an indication of the first zone scene to be transmitted to a first zone player in the first zone scene, and cause storage of the first zone scene. See, e.g., '966 Patent, claim 1. Additionally, the instructions, when executed, cause the computing device to be operable to (i) receive a second request to create a second zone scene comprising the first zone player and at least one other zone player that is not in the first zone scene, and (ii) based on the second request, cause creation of the second zone scene, cause an indication of the second zone scene to be transmitted to the first zone player, and cause storage of the second zone scene. *Id.* Additionally yet, the instructions, when executed, cause the computing device to be operable to (i) display representations of the first and second zone scenes, (ii) while displaying the representations, receive a third request to invoke the first zone scene, and (iii) based on the third request, cause the first zone player to transition from operating in a standalone mode to operating in accordance with the first predefined grouping of zone players so that the first zone player is configured to coordinate with at least the second zone player to output media in synchrony with output of media by at least the second zone player. *Id.*

U.S. Patent No. 10,848,885

70.94. Sonos is the owner of U.S. Patent No. 10,848,885 (the "'885 Patent"), entitled "Zone Scene Management," which was duly and legally issued by the United States Patent and Trademark Office ("USPTO") on November 24, 2020. A copy of the '885 Patent, is attached hereto as Exhibit 45. D.

71.95. The '885 Patent is related to the '206 and '966 Patents Patent in that they are all both continuations of application No. 13/896,829, filed on May 17, 2013, now U.S. Patent No. 8,843,228. Thus, the '885, and '966 and '206 Patents share essentially the same

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specification. Sonos incorporates by reference and re-alleges paragraphs 64-7387-91 of this Amended Complaint as if fully set forth herein.

72.96. The '885 Patent claims devices, computer-readable media, and methods for managing and operating in accordance with different "zone scenes," which provides an unconventional solution to the technological problems related to grouping zone players that are described in the '885 Patent.

73.97. For example, claim 1 of the '885 Patent describes a first zone player with one or more processors that can execute instructions stored in the first zone player's non-transitory, computer-readable medium. Those instructions, when executed, cause the first zone player to be operable to, while operating in a standalone mode, (i) receive a first indication that the first zone player has been added to a first zone scene comprising a first predetermined grouping of zone players that are to be configured for synchronous playback when the first zone scene is invoked, and (ii) receive a second indication that the first zone player has been added to a second zone scene comprising the first zone player and at least one other zone player that is not in the first zone scene that are to be configured for synchronous playback when the second zone scene is invoked. *Id.* Additionally, the instructions, when executed, cause the first zone player to continue to operate in a standalone mode until one of the first and second zone scenes has been selected for invocation. *Id.* Additionally yet, the instructions, when executed, cause the first zone player to be operable to, (i) after one of the first or second zone scenes has been selected for invocation, receive an instruction to operate in accordance with the given first or second zone scene comprising a predefined grouping of zone player and (ii) based on the instruction, transition from operating in a standalone mode to operating in accordance with the predefined grouping of zone players so that the first zone player is configured to output media in synchrony with output of media by at least one other zone player in the predefined grouping. *Id*.

COUNTCLAIM I: INFRINGEMENT OF U.S. PATENT NO. 9,967,615

74.98. Sonos incorporates by reference and re-alleges paragraphs 1-83987 of this Amended Complaint as if fully set forth herein.

75.99. Google and/or users of the Google Wireless Audio System have directly infringed (either literally or under the doctrine of equivalents) and continue to directly infringe one or more of the claims of the '615 Patent, in violation of 35 U.S.C. § 271(a), by making, using, offering for sale, and/or selling the Google Wireless Audio System within the United States and/or importing the Google Wireless Audio System into the United States without authority or license.

4. As just one non-limiting example, set forth below is an exemplary infringement claim chart for claim 13 of the '615 Patent in connection with the Google Wireless Audio System. This claim chart is based on publicly available information. Sonos reserves the right to modify this claim chart, including, for example, on the basis of information about the Google Wireless Audio System that it obtains during discovery.

100. On September In the course of this litigation, Sonos has served Google with infringement contentions detailing Google's infringement of the '615 Patent. See Ex. CH; Ex. CI. In particular, as set forth in Sonos's infringement contentions for the '615 Patent, each of Google's YouTube, YouTube Music, YouTube TV, YouTube Kids, and Google Play Music software apps (referred to in paragraphs 99-133 as "Cast-enabled apps") includes a "Cast" feature, is installed on a computing device, and when so installed, programs and/or otherwise configures a computing device such that each limitation of at least one of the asserted claims of the '615 Patent is satisfied. Indeed, any use of the Cast feature results in the performance of each function recited in at least one asserted claim of the '615 Patent. As also set forth in Sonos's infringement contentions for the '615 Patent, each of Google's Cast-enabled displays (e.g., Nest/Home Hub and Nest Hub Max products) is also installed with software that includes the "Cast" feature, which further includes a "Stream Transfer" sub-feature, such that the Cast-enabled display is programmed and/or otherwise configured to satisfy each limitation of at least one of the asserted claims of the '615 Patent. For the avoidance of doubt, Sonos incorporates herein by reference under Rule 10(c) these infringement contentions for all purposes.

76.101. In addition to providing Google with a claim chart detailing Google's infringement of the '615 Patent on February 22, 2019, on September 28, 2020, Sonos provided

Google with a draft of the original complaint prior to its filing. That draft identified the '615 Patent and described how Google's products infringed. Thus, Google had actual knowledge of Sonos's allegation that Google infringed claims of the '615 Patent prior to Sonos filing this action.

Additionally and/or alternatively, Google has indirectly infringed and continues to indirectly infringe one or more of the claims of the '615 Patent, in violation of 35 U.S.C. § 271(b), by actively inducing users of the Google Wireless Audio System to directly infringe the one or more claims of the '615 Patent. In particular, (a) Google had actual knowledge of the '615 Patent or was willfully blind to its existence prior to, and no later than, February 2019 and had actual knowledge or was willfully blind to Sonos's infringement allegations at least as early as September 28, 2020 when Sonos provided Google a copy of the complaint (see ¶¶ 19-29, above), (b) Google intentionally causes, urges, or encourages users of the Google Wireless Audio System to directly infringe one or more claims of the '615 Patent by promoting, advertising, and instructing customers and potential customers about the Google Wireless Audio System (including uses thereof) and encouraging such customers and potential customers to engage in activity that constitutes direct infringement (see Exs. 22 27; see also citations above in the exemplary infringement claim chart for claim 13 W-Z;), (c) Google has continued to intentionally cause, urge, or encourage users of the Google Wireless Audio System in such a manner both since becoming aware of the '615 Patent), (c) Google and since Sonos told Google that such conduct was inducing infringement on September 28, 2020, (d) Google knows (or should know) and has known (or should have known) that its actions will induce users of the Google Wireless Audio System to directly infringe one or more claims the '615 Patent, and (4) e) users of the Google Wireless Audio System directly infringe one or more claims of the '615 Patent. For instance, at a minimum, Google has supplied and continues to supply the YouTube Music, Google Play Music, and YouTube apps to customers while knowing that installation and/or use of one or more of these apps will infringe one or more claims of the '615 Patent, and that Google's customers then directly infringe one or more claims of the '615 Patent by installing

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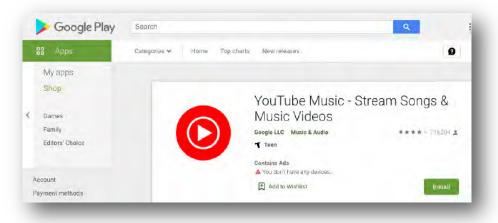
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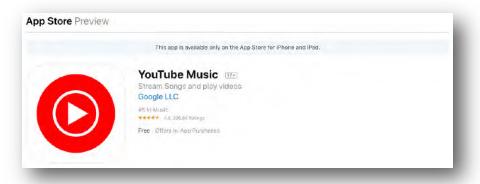
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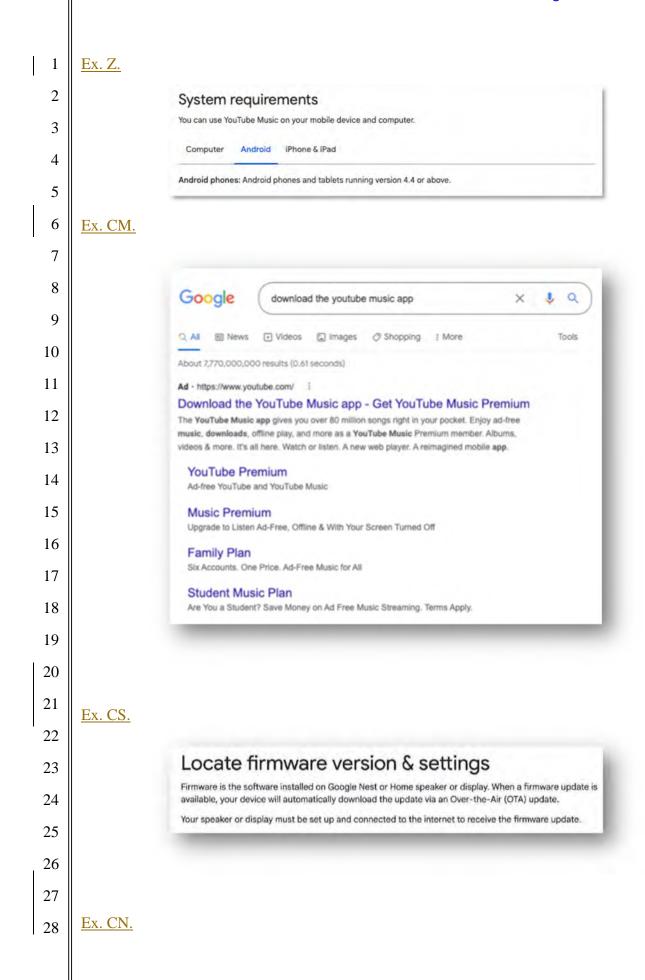
and/or using one or more of the these apps in accordance with Google's product literature. See, e.g., id.

103. For instance, at a minimum, Google has supplied and continues to supply (i) the YouTube, YouTube Music, YouTube TV, YouTube Kids, and Google Play Music software apps and (ii) software (e.g., firmware and/or Cast-enabled apps) for installation onto Cast-enabled displays to customers while knowing that installation and/or use of one or more of these software packages will infringe one or more claims of the '615 Patent and that Google's customers then directly infringe one or more claims of the '615 Patent by installing and/or using one or more of these software packages in accordance with Google's product literature. See, e.g., id. In other words, Google specifically intends to induce its customers to infringe the '615 Patent by intentionally encouraging and instructing its customers to install such software packages onto their computing devices. Example evidence of such conduct includes:



Ex. Y.





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Updates to Google Nest or Home speakers and displays

To enjoy the latest and greatest features available on Google Nest or Home speaker or display, your device may need to be updated to the most recent software version. This is done automatically as part of setup so there's nothing you need to do to get the update.

Ex. CO.

Case 3:21-cv-07559-WHA

104. Moreover, example evidence of Google encouraging and instructing its customers to use the accused Cast feature included in the Cast-enabled apps in an infringing manner includes:

Playing music on Google Nest or Google Home device is a simple way to enjoy your favorite audio apps optimized for your speaker. You can even use your mobile device or tablet as a remote and control everything from playback to volume.

Step 1. Cast from Chromecast-enabled apps to speaker or display

- Make sure your mobile device or tablet is connected to the same Wi-Fi network or linked to the same account as your speaker or display.
- 2. Open a Chromecast-enabled app.
- 3. Tap the Cast button 📆
- 4. Tap the speaker or display you'd like to cast to.
- 5. When you're connected, the Cast button will turn from light to dark gray, letting you know you're connected.
- 6. You can now cast audio and video to your speaker or display from your device.
- 7. To stop casting, tap the Cast button 🗊 at the top of your device. Tap Stop Casting in the box that appears.

Ex. CP.

105. Further yet, example evidence of Google encouraging and instructing its customers to use the Stream Transfer feature in an infringing manner includes:

Move media from one cast device to another

Move music, podcasts, radio, and YouTube videos currently streaming from your Google Nest, Google Home, or Chromecast device to another Nest speaker, speaker group, display, or Chromecast-connected device.

Google Nest Hub

1. On your Nest Hub's Home screen, tap the active media card to bring up the media player.

2. At the bottom left corner of the screen, tap Devices to find the list of available devices and speaker groups.

3. Select the device(s) you want to move your media to.

4. Deselect the device(s) you want to move your media from.

Ex. CQ.

106. Google has continued to engage in the conduct described above by way of example since it became aware of the '615 Patent and since Sonos informed Google in Sonos's December 21, 2020 infringement contentions (and each subsequent instance of amended infringement contentions) that such conduct was inducing others to directly infringe the '615 Patent. Google chose not to cease its conduct despite this. Thus, Google has engaged in this conduct with the specific intent to infringe the '615 Patent because this conduct was expressly intended to encourage users to download and install the YouTube, YouTube Music, YouTube TV, YouTube Kids, and Google Play Music software apps and software (e.g., firmware and/or Cast-enabled apps) for installation onto Cast-enabled displays, as well as use computing devices installed with such software – the very actions that result in direct infringement of the '615 Patent.

107. Sonos has identified additional evidence of Google's inducing conduct in its infringement contentions and interrogatory responses, which Sonos incorporates herein by reference under Rule 10(c) for all purposes. *See* Exs. CH, CW.

Additionally and/or alternatively, Google has indirectly infringed and continues to indirectly infringe one or more of the claims of the '615 Patent, in violation of 35 U.S.C. § 271(c), by offering to sell or selling within the United States, and/or importing into the United States, components in connection with the Google Wireless Audio System that contribute to the direct infringement of the '615 Patent by users of the Google Wireless Audio System. In particular, (a) Google had actual knowledge of the '615 Patent or was willfully blind to its existence prior to, and no later than, February 2019 and had actual knowledge or was willfully blind to Sonos's infringement allegations at least as early as September 28, 2020 when Sonos provided Google a copy of the complaint (see ¶ 19 29 17-30, 53-65, above), (b) Google offers for sale, sells, and/or imports, in connection with the Google Wireless Audio System, one or more material components of the invention of the '615 Patent that are not staple articles of commerce suitable for substantial noninfringingnon-infringing use, (c) Google knows (or should know) that such component(s) were especially made or especially adapted for use in an infringement of

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the '615 Patent, and (d) users of devices that comprise such material component(s) directly infringe one or more claims of the '615 Patent. For instance, at a minimum, Google offers for sale, sells, and/or imports (i) the YouTube, YouTube Music, YouTube TV, YouTube Kids, and Google Play Music, and YouTube software apps for installation on devices (e.g., smartphones, tablets, and computers) and (ii) software (e.g., firmware and/or Cast-enabled apps) for installation onto Cast-enabled displays that meet one or more claims of the '615 Patent. See, e.g., Exs. 22 27. These apps are W-Z, CN, CS. Each of these pieces of software is a material component of the devices that meet the one or more claims of the '615 Patent. Further, Google especially made and/or adapted these appsthis software for installation and use on devices that meet the one or more claims of the '615 Patent, and each of these apps are pieces of software is not a staple article of commerce suitable for substantial noninfringingnon-infringing use. Google's customers then directly infringe the one or more claims of the '615 Patent by installing and/or using these appsthis software on the customers' devices.

109. More specifically, Google supplies software components, such as the YouTube, YouTube Music, YouTube TV, YouTube Kids, and Google Play Music software apps, that include the accused Cast feature as part of Google's own Cast-enabled apps for installation onto computing devices in the United States and as part of Google's own Cast-enabled software (e.g., firmware and/or Cast-enabled apps) for installation onto Cast-enabled displays in the United States, and each time a user installs these software components, the user "makes" an infringing device and thereby directly infringes the asserted claims of the '615 Patent under 35 U.S.C. § 271(a).

110. These software components are material components of infringing devices, such as computing devices provisioned with one or more Cast-enabled apps, and are not staple articles or commodities of commerce suitable for substantial non-infringing use because the only possible use for these software components is to be installed and run on infringing Cast-enabled computing devices and/or Cast-enabled displays. In other words, there is no other reasonable, suitable, or even conceivable use for these software components other than to be downloaded to and installed on computing devices, such as mobile phones or tablet computers. Because the

asserted claims are directed to capability and not actual use or performance, actual execution of software functionality is not required. Infringement occurs as soon as the software component is downloaded to and/or installed on the computing device. Thus, the fact that the computing device may be capable of carrying out non-infringing functionality (in addition to being capable of carrying out the claimed functionality) does not negate infringement and is not a non-infringing use because infringement has already occurred as a result of the download and/or installation of the software component onto the computing device.

111. Along with its actual knowledge of the '615 Patent, Google knew (or should have known) that the software components were especially made or adapted for installation on infringing devices and that installation of these software components by others resulted in (and continues to result in) direct infringement of the '615 Patent under 35 U.S.C. § 271(a) because each such installation "makes" a device that meets every element of claims 13-15, 18-21, 23-26, 28-29 of the '615 Patent.

apps for installation onto computing devices and the accused Cast and Stream Transfer features as part of Google's own Cast-enabled apps for installation onto computing devices and the accused Cast and Stream Transfer features as part of Google's own Cast-enabled software for installation onto Cast-enabled displays, in the United States via software downloads. These software component features are material components of infringing devices and are not staple articles or commodities of commerce suitable for substantial non-infringing use because the only possible use for these software component features is to be operated on infringing Cast-enabled computing devices and/or Cast-enabled displays. For example, at a minimum, the use of the accused Cast feature results in the performance of each function recited in at least one asserted claim of the '615 Patent. Along with its actual knowledge of the '615 Patent, Google knew (or should have known) that the software component features were especially made or adapted to perform specific functions that are a material part of the inventions of the '615 Patent and that use of these software component features by others resulted in (and continues to result in) direct infringement of the '615 Patent under 35 U.S.C. § 271(a).

infringed the asserted claims of the '615 Patent. For example, users have installed the supplied software components for operating the accused Cast feature (which are included in Google's own Cast-enabled apps) onto Cast-enabled computing devices in the United States, thereby "making" infringing devices. As another example, users have installed the supplied software components for operating the accused Cast feature (which are included in firmware, as well as Cast-enabled apps) onto Cast-enabled displays in the United States, thereby "making" updated Cast-enabled displays that are infringing devices. As yet another example, after installing the supplied software components onto Cast-enabled computing devices and Cast-enabled displays, users have used these infringing devices, including the use of the accused Cast and Stream Transfer features, which also constitutes direct infringement.

Moreover, as a result of Google's contributory conduct, others have directly

114. Pursuant to 35 U.S.C. § 271(f)(1), Google has also infringed by supplying in or from the United States software and/or firmware components, which constitute substantial portions of the components of Sonos's patented inventions, and actively, knowingly, and intentionally induced (and continues to actively, knowingly, and intentionally induce) others outside of the United States to combine these software and/or firmware components in a manner that, if such combination would have occurred in the United States (as it does pursuant to the theories set forth above), infringes the asserted claims of the '615 Patent. And these combinations by those outside of the United States do in fact occur. Accordingly, by supplying such software and/or firmware components from the United States, Google is liable for infringement under 35 U.S.C. § 271(f)(1).

performing the accused functionality as part of Google's own Cast-enabled apps (as well as the other apps identified in Sonos's infringement contentions served in this case, see Exs. CH, CI) for installation onto computing devices and also as part of Google's own cast-enabled software for installation onto Cast-enabled displays. These software and/or firmware components are at least substantial portions of the components of the patented inventions of the '615 Patent. Google supplies these software and/or firmware components from the United States to various entities

	outside the United States. Google then induces those entities to combine the supplied
	components in a manner that would, if combined within the United States, constitute
	infringement. Google has actively, knowingly, and intentionally induced (and continues to
	actively, knowingly, and intentionally induce) these entities to make such combinations outside
	the United States in various ways, in violation of 35 U.S.C. § 271(f)(1).
	116. For example, through Google's website, advertising and promotional material,
	user guides, and/or the Google Play Store, Google has actively, knowingly, and intentionally
	encouraged and induced (and continues to actively, knowingly, and intentionally encourage and
	induce) others outside the United States to install one or more of the Cast-enabled apps (including
	YouTube Music, Google Play Music, and YouTube apps, as well as the other apps set forth in
	Sonos's infringement contentions, Exs. CH, CI) onto computing devices outside of the United
	States. If this combination were done within the United States, that act would constitute
	"mak[ing]" an infringing device, which constitutes direct infringement of claims 13-15, 18-21,
	23-26, 28-29 of the '615 Patent under 35 U.S.C. § 271(a). See, e.g., Ex. CM
	(https://support.google.com/youtubemusic/answer/6313540?co=GENIE.Platform%3DDesktop&co
	co=1, indicating that the YouTube Music app is available in dozens of countries other than the
	<u>United States</u>).
	117. As another example, through Google's website, advertising and promotional
	material, user guides, and Cast-enabled apps, Google has actively, knowingly, and intentionally
	encouraged and induced (and continues to actively, knowingly, and intentionally encourage and
	induce) others outside the United States to install software (e.g., firmware updates and/or Cast-
	enabled apps) onto Cast-enabled displays outside of the United States. If this combination were
	done within the United States, that act would constitute "mak[ing]" an infringing device, which
	constitutes direct infringement of claims 13-15, 18-21, 23-26, 28-29 of the '615 Patent under 35
	<u>U.S.C. § 271(a).</u>
	118. As another example, through Google's relationship with third-party manufacturers
	third-party distributers, or via an otherwise affiliated entity that acts in a manufacturer or
1	distributor role. Google actively, knowingly, and intentionally encourages and induces or

instructs such parties to install one or more of Cast-enabled apps (including YouTube Music,	
Google Play Music, and YouTube apps) onto computing devices outside of the United States. If	
this combination were done within the United States, that act would constitute "mak[ing]" an	
infringing device, which constitutes direct infringement of claims 13-15, 18-21, 23-26, 28-29 of	
the '615 Patent under 35 U.S.C. § 271(a).	
119. On information and belief, Google engages in the same conduct set out above	
(with respect to Google's infringement under § 271(b)) in foreign countries and with the intent to	
encourage users in foreign countries to download and install Cast-enabled apps onto computing	
devices.	
120. As another example, through Google's relationship with third-party manufacturers,	
third-party distributers, or via an otherwise affiliated entity that acts in a manufacturer or	
distributor role, Google actively, knowingly, and intentionally encourages and induces or	
instructs such parties to install software (e.g., firmware updates and/or apps) onto Cast-enabled	
displays outside of the United States. If this combination were done within the United States, that	
act would constitute "mak[ing]" an infringing device, which constitutes direct infringement of	
claims 13-15, 18-21, 23-26, 28-29 of the '615 Patent under 35 U.S.C. § 271(a).	
121. As still another example, through Google's relationship with entities (including	
affiliated entities) that operate servers outside of the United States that host Cast-enabled apps	
(including YouTube Music, Google Play Music, and YouTube apps, as well as the other apps set	
forth in Sonos's infringement contentions, Exs. CH, CI) for download onto computing devices	
and/or software (e.g., firmware and/or apps) for download onto Cast-enabled displays, Google	
actively, knowingly, and intentionally encourages and induces or instructs these entities to load,	
store, or otherwise provide the apps and/or software onto these servers. For instance, Google	

operates data centers and download servers in countless foreign countries and regions.

Meet our network



See Ex. CR (https://cloud.google.com/about/locations#regions). In at least these foreign countries and regions, users are able to download Cast-enabled apps onto computing devices. To facilitate this, Google has intentionally encouraged and induced or instructed other entities (including Google's affiliated entities) to upload software packages constituting the Cast-enabled apps onto download servers that are located in foreign countries. If this combination were done within the United States, that act would constitute direct infringement of certain asserted claims of the '615 Patent (e.g., claims 13-15, 18-21, and 23-24 of the '615 Patent) by "mak[ing]" and/or "us[ing]" servers that host such software in violation of 35 U.S.C. § 271(a). See also Ex. CH (Sonos's infringement contentions).

122. Pursuant to 35 U.S.C. § 271(f)(2), Google has also infringed by supplying software components in or from the United Sates to be combined, installed, loaded, and/or used by others outside of the United States, where these software components are components of the patented inventions that have no substantial non-infringing use and are not staple articles or commodities of commerce — with knowledge that these software components were especially made or adapted for use and an intent that these software components would be combined, installed, loaded, and/or used outside the United States such that, if such combination, installation, load, and/or use occurred within the United States (as it does pursuant to the theories set forth above), it would infringe the asserted claims of the '615 Patent. And these combinations

by those outside of the United States do in fact occur. Accordingly, by supplying such software components in or from the United States, Google is liable for infringement under 35 U.S.C. § 271(f)(2).

123. Despite knowing of the '615 Patent, Google supplies software components for performing the accused Cast functionality as part of Google's Cast-enabled apps (e.g., the YouTube Music, Google Play Music, and YouTube apps) for installation onto computing devices outside the United States and also as part of Google's own software (e.g., firmware and/or Cast-enabled apps) for installation onto Cast-enabled displays outside the United States. Google intends that others outside the United States, including users, install these software components onto computing devices and Cast-enabled displays and knows that such installation does in fact occur and that such installation, if occurring in the United States, would constitute "mak[ing]" an infringing device thereby directly infringing claims 13-15, 18-21, 23-26, 28-29 of the '615 Patent under 35 U.S.C. § 271(a).

124. As another example, Google supplies software components for performing the accused Cast functionality to third-party manufacturers, third-party distributers, or to an otherwise affiliated entity that acts in a manufacturer or distributor role, who then, outside of the United States installs these software components onto computing devices outside of the United States.

Google intends that these parties install these software components onto computing devices outside of the United States. If this combination were done within the United States, that act would constitute "mak[ing]" an infringing device, which constitutes direct infringement of claims 13-15, 18-21, 23-26, 28-29 of the '615 Patent under 35 U.S.C. § 271(a).

125. As another example, Google supplies software components for performing the accused Cast functionality to entities (including affiliated entities) that operate servers outside of the United States that host Cast-enabled apps for download onto Cast-enabled computing devices and/or Cast-enabled software (e.g., firmware and/or Cast-enabled apps) for download onto Cast-enabled displays. Google intends that these entities load, store, or otherwise provide the Cast-enabled apps and/or Cast-enabled software onto these servers. If this combination were done within the United States, that act would constitute direct infringement of certain asserted claims

Additional allegations regarding Google's pre-suit knowledge of the '615

1	81.130. Sonos is entitled to recover from Google all damages that Sonos has
2	sustained as a result of Google's infringement of the '615 Patent, including, without limitation, a
3	
	reasonable royalty and lost profits. Sonos is in compliance with any applicable marking and/or
4	notice provisions of 35 U.S.C. § 287 with respect to the '615 Patent.
5	Google's infringement of the '615 Patent was and continues to be willful
6	and deliberate, entitling Sonos to enhanced damages.
7	Google's infringement of the '615 Patent is exceptional and entitles Sonos
8	to attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.
9	64.133. Google's infringement of the '615 Patent has caused irreparable harm
10	(including the loss of market share) to Sonos and will continue to do so unless enjoined by this
11	Court.
12	COUNTCLAIM II: INFRINGEMENT OF U.S. PATENT NO. 10,779,033
13	Sonos incorporates by reference and re-alleges paragraphs 1-83133 of this
14	Amended Complaint as if fully set forth herein.
15	86.135. Google and/or users of the Google Wireless Audio System have directly
16	infringed (either literally or under the doctrine of equivalents) and continue to directly infringe
17	one or more of the claims of the '033 Patent, in violation of 35 U.S.C. § 271(a), by making, using
18	offering for sale, and/or selling the Google Wireless Audio System within the United States
19	and/or importing the Google Wireless Audio System into the United States without authority or
20	license.
21	5. As just one non limiting example, set forth below is an exemplary infringement
22	claim chart for claim 1 of the '033 Patent in connection with the Google Wireless Audio System.
23	This claim chart is based on publicly available information. Sonos reserves the right to modify
24	this claim chart, including, for example, on the basis of information about the Google Wireless
25	Audio System that it obtains during discovery.
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27	136. In the course of this litigation, Sonos has served Google with infringement
28	contentions detailing Google's infringement of the '033 Patent. See Ex. CH; Ex. CJ. In

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1	particular, as set forth in Sonos's infringement contentions for the '033 Patent, each of Google's
2	YouTube, YouTube Music, YouTube TV, and YouTube Kids software apps (referred to in
3	paragraphs 136-167 as "Cast-enabled apps") includes a "Cast" feature, is installed on a
4	computing device, and when so installed, programs and/or otherwise configures a computing
5	device such that each limitation of at least one of the asserted claims of the '033 Patent is
6	satisfied. As also set forth in Sonos's infringement contentions for the '033 Patent, each of
7	Google's Cast-enabled displays is also installed with software that includes the "Cast" feature,
8	which further includes a "Stream Transfer" sub-feature, such that the Cast-enabled display is
9	programmed and/or otherwise configured to satisfy each limitation of at least one of the asserted
10	claims of the '033 Patent. For the avoidance of doubt, Sonos incorporates herein by reference
11	under Rule 10(c) these infringement contentions for all purposes.
12	87.137. On September 28, 2020, Sonos provided Google with a draft of the origin
13	complaint prior to its filing. That draft identified the '033 Patent and described how Google's

al complaint prior to its filing. That draft identified the '033 Patent and described how G products infringed. Thus, Google had actual knowledge of Sonos's allegation that Google infringed claims of the '033 Patent prior to Sonos filing this action.

Additionally and/or alternatively, Google has indirectly infringed and continues to indirectly infringe one or more of the claims of the '033 Patent, in violation of 35 U.S.C. § 271(b), by actively inducing users of the Google Wireless Audio System to directly infringe the one or more claims of the '033 Patent. In particular, (a) Google had actual knowledge of the '033 Patent and Sonos's infringement contentions, or was willfully blind to their existence, no later than September 28, 2020 when Sonos provided Google with a copy of the complaint (see \P 19-29 17-30, 53-65, above), (b) Google intentionally causes, urges, or encourages users of the Google Wireless Audio System to directly infringe one or more claims of the '033 Patent by promoting, advertising, and instructing customers and potential customers about the Google Wireless Audio System (including uses thereof) and encouraging such customers and potential customers to engage in activity that constitutes direct infringement (see Exs. 22-27; see also citations above in the exemplary infringement claim chart for claim 1 of the '033 Patent), (c) Google knows (or should know W-Z), (c) Google has continued to

intentionally cause, urge, or encourage users of the Google Wireless Audio System in such a
manner both since becoming aware of the '033 Patent and since Sonos told Google that such
conduct was inducing infringement on September 28, 2020, (d) Google knows (or should know)
and has known (or should have known) that its actions will induce users of the Google Wireless
Audio System to directly infringe one or more claims the '033 Patent, and (d) e) users of the
Google Wireless Audio System directly infringe one or more claims of the '033 Patent.
89.139. For instance, at a minimum, Google has supplied and continues to supply
(i) the YouTube, YouTube Music, Google Play Music YouTube TV, and YouTube appsKids
software apps and (ii) software (e.g., firmware and/or Cast-enabled apps) for installation onto
Cast-enabled displays to customers while knowing that installation and/or use of one or more of
these appspieces of software will infringe one or more claims of the '033 Patent, and that
Google's customers then directly infringe one or more claims of the '033 Patent by installing
and/or using one or more of these appspieces of software in accordance with Google's product
literature. See, e.g., id. In other words, Google specifically intends to induce its customers to
infringe the '033 Patent by intentionally encouraging and instructing its customers to install such
software/pieces of software onto their computing devices.
140. Example evidence of Google intentionally encouraging and instructing its
customers to infringe the '033 Patent can be found at paragraphs 103-1057.
141. Google has continued to engage in the conduct described above by way of
example since it became aware of the '033 Patent and since Sonos informed Google in Sonos's
December 21, 2020 infringement contentions (and each subsequent instance of amended
infringement contentions) that such conduct was inducing others to directly infringe the '033
Patent. Google chose not to cease its conduct despite this. Thus, Google has engaged in this
conduct with the specific intent to infringe the '033 Patent because this conduct was expressly
intended to encourage users to download and install the YouTube, YouTube Music, YouTube
TV, and YouTube Kids software apps and software (e.g., firmware and/or Cast-enabled apps) for
installation onto Cast-enabled displays, as well as use computing devices installed with such
software – the very actions that result in direct infringement of the '033 Patent.

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Additionally and/or alternatively, Google has indirectly infringed and 90.142. continues to indirectly infringe one or more of the claims of the '033 Patent, in violation of 35 U.S.C. § 271(c), by offering to sell or selling within the United States, and/or importing into the United States, components in connection with the Google Wireless Audio System that contribute to the direct infringement of the '033 Patent by users of the Google Wireless Audio System. In particular, (a) Google had actual knowledge of the '033 Patent and Sonos's infringement contentions, or was willfully blind to their existence, no later than September 28, 2020 when Sonos provided Google with a copy of the complaint (see \P 17-30, 53-65, above), (b) Google offers for sale, sells, and/or imports, in connection with the Google Wireless Audio System, one or more material components of the invention of the '033 Patent that are not staple articles of commerce suitable for substantial noninfringingnon-infringing use, (c) Google knows (or should know) that such component(s) were especially made or especially adapted for use in an infringement of the '033 Patent, and (d) users of devices that comprise such material component(s) directly infringe one or more claims of the '033 Patent. For instance, at a minimum, Google offers for sale, sells, and/or imports (i) the YouTube, YouTube Music, Google Play Music YouTube TV, and YouTube Kids software apps for installation on devices (e.g., smartphones, tablets, and computers) and (ii) software (e.g., firmware and/or Cast-enabled apps) for installation onto Cast-enabled displays that meet one or more claims of the '033 Patent. See, e.g., Exs. 22-27. These apps are W-Z. Each of these pieces of software is a material component of the devices that meet the one or more claims of the '033 Patent. Further, Google especially made and/or adapted these appsthis software for installation and use on devices that meet the one or more claims of the '033 Patent, and each of these apps arepieces of software is not a staple article of commerce suitable for substantial noninfringing use. Google's customers then directly infringe the one or more claims of the '033 Patent by installing and/or using these appsthis software on the customers' devices. More specifically, Google supplies software components, such as the YouTube,

YouTube Music, YouTube TV, and YouTube Kids software apps, that include the accused Cast

United States and as part of Google's own Cast-enabled software (e.g., firmware and/or Cast-enabled apps) for installation onto Cast-enabled displays in the United States, and each time a user installs these software components, the user "makes" an infringing device and thereby directly infringes the asserted claims of the '033 Patent under 35 U.S.C. § 271(a).

These software components are material components of infringing devices, such as computing devices provisioned with one or more Cast-enabled apps, and are not staple articles or commodities of commerce suitable for substantial non-infringing use because the only possible use for these software components is to be installed and run on infringing Cast-enabled computing devices and Cast-enabled displays. In other words, there is no other reasonable, suitable, or even conceivable use for these software components other than to be downloaded to and installed on computing devices, such as mobile phones or tablet computers. Because the asserted claims are directed to capability and not actual use or performance, actual execution of software functionality is not required. Infringement occurs as soon as the software component is downloaded to and/or installed on the computing device. Thus, the fact that the computing device may be capable of carrying out non-infringing functionality (in addition to being capable of carrying out the claimed functionality) does not negate infringement and is not a non-infringing use because infringement has already occurred as a result of the download and/or installation of the software component onto the computing device.

145. Along with its actual knowledge of the '033 Patent, Google knew (or should have known) that the software components were especially made or adapted for installation on infringing devices and that installation of these software components by others resulted in (and continues to result in) direct infringement of the '033 Patent under 35 U.S.C. § 271(a) because each such installation "makes" a device that meets every element of claims 1-2, 4, 7-13 of the '033 Patent.

146. Additionally and/or alternatively, as discussed before, Google supplies software component features, including the accused Cast feature as part of Google's own Cast-enabled apps for installation onto computing devices and the accused Cast and Stream Transfer features as part of Google's own Cast-enabled software for installation onto Cast-enabled displays, in the

United States via software downloads. These software component features are material components of infringing devices and are not staple articles or commodities of commerce suitable for substantial non-infringing use because the only possible use for these software component features is to be operated on infringing Cast-enabled computing devices and/or Cast-enabled displays. Along with its actual knowledge of the '033 Patent, Google knew (or should have known) that the software component features were especially made or adapted to perform specific functions that are a material part of the inventions of the '033 Patent and that use of these software component features by others involved (and continues to involve) a direct infringement of the '033 Patent under 35 U.S.C. § 271(a).

147. Moreover, as a result of Google's contributory conduct, others have directly infringed the asserted claims of the '033 Patent. For example, users have installed the supplied software components for operating the accused Cast feature (which are included in Google's own Cast-enabled apps) onto Cast-enabled computing devices in the United States, thereby "making" infringing devices. As another example, users have installed the supplied software components for operating the accused Cast feature (which are included in firmware, as well as Cast-enabled apps) onto Cast-enabled displays in the United States, thereby "making" updated Cast-enabled displays that are infringing devices. As yet another example, after installing the supplied software components onto Cast-enabled computing devices and Cast-enabled displays, users have used these infringing devices, including the use of the accused Cast and Stream Transfer features, which also constitutes direct infringement.

148. Pursuant to 35 U.S.C. § 271(f)(1), Google has also infringed by supplying in or from the United States software and/or firmware components, which constitute substantial portions of the components of Sonos's patented inventions, and actively, knowingly, and intentionally induced (and continues to actively, knowingly, and intentionally induce) others outside of the United States to combine these software and/or firmware components in a manner that, if such combination would have occurred in the United States (as it does pursuant to the theories set forth above), infringes the asserted claims of the '033 Patent. And these combinations by those outside of the United States do in fact occur. Accordingly, by supplying

such software and/or firmware components from the United States, Google is liable for infringement under 35 U.S.C. § 271(f)(1).

149. Despite knowing of the '033 Patent, Google supplies software components for performing the accused functionality as part of Google's own YouTube, YouTube Music, YouTube TV, and YouTube Kids apps (as well as the other apps identified in Google's infringement contentions served in this case, *see* Exs. CH, CJ) for installation onto computing devices and also as part of Google's own cast-enabled software for installation onto Cast-enabled displays. These software and/or firmware components are at least substantial portions of the components of the patented inventions of the '033 Patent. Google supplies these software and/or firmware components from the United States to various entities outside the United States. Google then induces those entities to combine the supplied components in a manner that would, if combined within the United States, constitute infringement. Google has actively, knowingly, and intentionally induced (and continues to actively, knowingly, and intentionally induce) these entities to make such combinations outside the United States in various ways, in violation of 35 U.S.C. § 271(f)(1).

150. For example, through Google's website, advertising and promotional material, user guides, and/or the Google Play Store, Google has actively, knowingly, and intentionally encouraged and induced (and continues to actively, knowingly, and intentionally encourage and induce) others outside the United States to install one or more of the Cast-enabled apps (including YouTube, YouTube Music, YouTube TV, and YouTube Kids apps) onto computing devices outside of the United States. If this combination were done within the United States, that act would constitute "mak[ing]" an infringing device, which constitutes direct infringement of claims 1-2, 4, 7-13 of the '033 Patent under 35 U.S.C. § 271(a). See, e.g., Ex. CM (https://support.google.com/youtubemusic/answer/6313540?co=GENIE.Platform%3DDesktop&oco=1, indicating that the YouTube Music app is available in dozens of countries other than the United States).

151. As another example, through Google's website, advertising and promotional material, user guides, and Cast-enabled apps, Google has actively, knowingly, and intentionally

encouraged and induced (and continues to actively, knowingly, and intentionally encourage and induce) others outside the United States to install software (e.g., firmware updates and/or Castenabled apps) onto Cast-enabled displays outside of the United States. If this combination were done within the United States, that act would constitute "mak[ing]" an infringing device, which constitutes direct infringement of claims 1-2, 4, 7-13 of the '033 Patent under 35 U.S.C. § 271(a).

- 152. As another example, through Google's relationship with third-party manufacturers, third-party distributors, or via an otherwise affiliated entity that acts in a manufacturer or distributor role, Google actively, knowingly, and intentionally encourages and induces or instructs such parties to install one or more of the accused apps (including YouTube, YouTube Music, YouTube TV, and YouTube Kids apps, as well as the other apps set forth in Sonos's infringement contentions, Exs. CH, CJ) onto computing devices outside of the United States. If this combination were done within the United States, that act would constitute "mak[ing]" an infringing device, which constitutes direct infringement of claims 1-2, 4, 7-13 of the '033 Patent under 35 U.S.C. § 271(a).
- 153. On information and belief, Google engages in the same conduct set out above (with respect to Google's infringement under § 271(b)) in foreign countries and with the intent to encourage users in foreign countries to download and install the accused apps onto computing devices.
- 154. As another example, through Google's relationship with third-party manufacturers, third-party distributers, or via an otherwise affiliated entity that acts in a manufacturer or distributor role, Google actively, knowingly, and intentionally encourages and induces or instructs such parties to install software (e.g., firmware updates and/or apps) onto the Castenabled displays outside of the United States. If this combination were done within the United States, that act would constitute "mak[ing]" an infringing device, which constitutes direct infringement of claims 1-2, 4, 7-13 of the '033 Patent under 35 U.S.C. § 271(a).
- 155. As still another example, through Google's relationship with entities (including affiliated entities) that operate servers outside of the United States that host Cast-enabled apps (e.g., Google's own YouTube, YouTube Music, YouTube TV, and YouTube Kids apps) for

download onto computing devices and/or software (e.g., firmware and/or apps) for download onto Cast-enabled displays, Google actively, knowingly, and intentionally encourages and induces or instructs these entities to load, store, or otherwise provide the apps and/or software onto these servers. For instance, Google operates data centers and download servers in countless foreign countries and regions.

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See Ex. CR (https://cloud.google.com/about/locations#regions). In at least these foreign countries and regions, users are able to download the Cast-enabled apps onto computing devices. To facilitate this, Google has intentionally encouraged and induced or instructed other entities (including Google's affiliated entities) to upload software packages constituting the Cast-enabled apps onto download servers that are located in foreign countries. If this combination were done within the United States, that act would constitute direct infringement of certain asserted claims of the '033 Patent (e.g., claims 12-13 of the '033 Patent) by "mak[ing]" and/or "us[ing]" servers that host such software in violation of 35 U.S.C. § 271(a). See also Ex. CH (Sonos's infringement contentions).

156. Pursuant to 35 U.S.C. § 271(f)(2), Google has also infringed by supplying software components in or from the United Sates to be combined, installed, loaded, and/or used by others outside of the United States, where these software components are components of the patented inventions that have no substantial non-infringing use and are not staple articles or

commodities of commerce – with knowledge that these software components were especially made or adapted for use and an intent that these software components would be combined, installed, loaded, and/or used outside the United States such that, if such combination, installation, load, and/or use occurred within the United States (as it does pursuant to the theories set forth above), it would infringe the asserted claims of the '033 Patent. And these combinations by those outside of the United States do in fact occur. Accordingly, by supplying such software components in or from the United States, Google is liable for infringement under 35 U.S.C. § 271(f)(2).

157. Despite knowing of the '033 Patent, Google supplies software components for

157. Despite knowing of the '033 Patent, Google supplies software components for performing the accused Cast functionality as part of Google's Cast-enabled apps (including YouTube, YouTube Music, YouTube TV, and YouTube Kids apps, as well as the other apps set forth in Sonos's infringement contentions, Exs. CH, CJ) for installation onto computing devices outside the United States and also as part of Google's own software (e.g., firmware and/or Cast-enabled apps) for installation onto Cast-enabled displays outside the United States. Google intends that others outside the United States, including users, install these software components onto computing devices and Cast-enabled displays and knows that such installation does in fact occur and that such installation, if occurring in the United States, would constitute "mak[ing]" an infringing device thereby directly infringing claims 1-2, 4, 7-13 of the '033 Patent under 35 U.S.C. § 271(a).

158. As another example, Google supplies software components for performing the accused Cast functionality to third-party manufacturers, third-party distributers, or to an otherwise affiliated entity that acts in a manufacturer or distributor role, who then, outside of the United States installs these software components onto computing devices outside of the United States.

Google intends that these parties install these software components onto computing devices outside of the United States. If this combination were done within the United States, that act would constitute "mak[ing]" an infringing device, which constitutes direct infringement of claims 1-2, 4, 7-13 of the '033 Patent under 35 U.S.C. § 271(a).

159. As another example, Google supplies software components for performing the accused Cast functionality to entities (including affiliated entities) that operate servers outside of the United States that host apps for download onto computing devices and/or Cast-enabled software (e.g., firmware and/or apps) for download onto Cast-enabled displays. Google intends that these entities load, store, or otherwise provide the apps and/or accused software onto these servers. If this combination were done within the United States, that act would constitute direct infringement of certain asserted claims of the '033 Patent (e.g., claims 12-13 of the '033 Patent) by "mak[ing]" and/or "us[ing]" servers that host such software in violation of 35 U.S.C. § 271(a).

160. Google knows the foregoing software components for performing the accused Cast functionality are material components of infringing devices and the patented inventions that are not staple articles or commodities of commerce suitable for substantial non-infringing use because the only possible use for these software components is to be loaded, installed, and/or run on infringing Cast-enabled computing devices and Cast-enabled displays.

91.161. Google's infringement of the '033 Patent is also willful because Google

(a) had actual knowledge of the '033 Patent and Sonos's infringement contentions no later than

September 28, 2020 (see ¶ 19 29 above), (b) engaged in the aforementioned activity despite an objectively high likelihood that Google's actions constituted infringement of the '033 Patent, and (c) this objectively—defined risk was either known or so obvious that it should have been known to Google. See, e.g., ¶¶ 17-30, 53-65, above.

162. Given the five-year period over which Sonos put Google on consistent and repeated notice of Sonos's patents and the breadth of Sonos's patent portfolio concerning specifically the products accused in this case, detailed above, this knowledge establishes that Google was, for some time periods, at least willfully blind to the fact that the '033 Patent existed and, for other time periods, had actual knowledge of the '033 Patent. Further, this knowledge and repeated and persistent disclosure establishes that Google, for some time periods, had at least failed to investigate whether it infringed the '033 Patent despite the existence of a high risk of infringement and, for other time periods, had actual knowledge of a credible and specific allegation of infringement of the '033 Patent.

1	92.163. Additional allegations regarding Google's pre-suit knowledge of the '033
2	Patent and willful infringement will likely have evidentiary support after a reasonable opportunity
3	for discovery.
4	93.164. Sonos is entitled to recover from Google all damages that Sonos has
5	sustained as a result of Google's infringement of the '033 Patent, including, without limitation, a
6	reasonable royalty and lost profits. Sonos is in compliance with any applicable marking and/or
7	notice provisions of 35 U.S.C. § 287 with respect to the '033 Patent.
8	94.165. Google's infringement of the '033 Patent was and continues to be willful
9	and deliberate, entitling Sonos to enhanced damages.
10	95.166. Google's infringement of the '033 Patent is exceptional and entitles Sonos
11	to attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.
12	96.167. Google's infringement of the '033 Patent has caused irreparable harm
13	(including the loss of market share) to Sonos and will continue to do so unless enjoined by this
14	Court.
15	COUNTCLAIM III: INFRINGEMENT OF U.S. PATENT NO. 10,469,966 9,344,206
16	97.168. Sonos incorporates by reference and re-alleges paragraphs 1-831687 of this
17	Amended Complaint as if fully set forth herein.
18	98.169. Google and/or users of the Google Wireless Audio System have directly
19	infringed (either literally or under the doctrine of equivalents) and continue to directly infringe
20	one or more of the claims of the '206'966 Patent, in violation of 35 U.S.C. § 271(a), by making,
21	using, offering for sale, and/or selling the Google Wireless Audio System within the United
22	States and/or importing the Google Wireless Audio System into the United States without
23	authority or license.
24	6. As just one non limiting example, set forth below is an exemplary infringement
25	claim chart for claim 1 of the '206 Patent in connection with the Google Wireless Audio System.
26	This claim chart is based on publicly available information. Sonos reserves the right to modify
27	this alries show its dealine for account, and the basis of information about the Court Window
	this claim chart, including, for example, on the basis of information about the Google Wireless

170. In the course of this litigation, Sonos has served Google with infringement contentions detailing Google's infringement of the '966 Patent. See Ex. CH; Ex. CK. In particular, as set forth in Sonos's infringement contentions for the '966 Patent, Google's Google Home app includes a "speaker group" feature, is installed on a computing device, and when so installed, programs and/or otherwise configures a computing device such that each limitation of at least one of the asserted claims of the '966 Patent is satisfied. For the avoidance of doubt, Sonos incorporates herein by reference under Rule 10(c) these infringement contentions for all purposes.

99.171. On September 28, 2020, Sonos provided Google with a draft of the original complaint prior to its filing. That draft identified the '206'966 Patent and described how Google's products infringed. Thus, Google had actual knowledge of Sonos's allegation that Google infringed claims of the '206'966 Patent prior to Sonos filing this action.

Additionally and/or alternatively, Google has indirectly infringed and continues to indirectly infringe one or more of the claims of the '206 Patent, in violation of 35 U.S.C. § 271(b), by actively inducing users of the Google Wireless Audio System to directly infringe the one or more claims of the '206 Patent. In particular, (a) Google had actual knowledge of the '206 Patent or was willfully blind to its existence prior to, and no later than, October 2016 and had actual knowledge or was willfully blind to Sonos's infringement allegations at least as early as September 28, 2020 when Sonos provided Google a copy of the complaint(see ¶ 19-29 above), (b) Google intentionally causes, urges, or encourages users of the Google Wireless Audio System to directly infringe one or more claims of the '206 Patent by promoting, advertising, and instructing customers and potential customers about the Google Wireless Audio System (including uses thereof) and encouraging such customers and potential customers to engage in activity that constitutes direct infringement (see Exs. 22-23; see also citations above in the exemplary infringement claim chart for claim 1 of the '206 Patent), (c) Google knows (or should know) that its actions will induce users of the Google Wireless Audio System to directly infringe one or more claims the '206 Patent, and (d) users of the Google Wireless Audio System directly infringe one or more claims of the '206 Patent. For instance, at a minimum, Google has supplied and continues to supply the Google Home app to customers while knowing that installation and/or use of this

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app will infringe one or more claims of the '206 Patent, and that Google's customers then directly infringe one or more claims of the '206 Patent by installing and/or using this app in accordance with Google's product literature. See, e.g., id.

8. Additionally and/or alternatively, Google has indirectly infringed and continues to indirectly infringe one or more of the claims of the '206 Patent, in violation of 35 U.S.C. § 271(c), by offering to sell or selling within the United States, and/or importing into the United States, components in connection with the Google Wireless Audio System that contribute to the direct infringement of the '206 Patent by users of the Google Wireless Audio System. In particular, (a) Google had actual knowledge of the '206 Patent or was willfully blind to its existence prior to, and no later than, October 2016 and had actual knowledge or was willfully blind to Sonos's infringement allegations at least as early as September 28, 2020 when Sonos provided Google a copy of the complaint (see ¶ 19-29 above), (b) Google offers for sale, sells, and/or imports, in connection with the Google Wireless Audio System, one or more material components of the invention of the '206 Patent that are not staple articles of commerce suitable for substantial noninfringing use, (c) Google knows (or should know) that such component(s) were especially made or especially adapted for use in an infringement of the '206 Patent, and (d) users of devices that comprise such material component(s) directly infringe one or more claims of the '206 Patent. For instance, at a minimum, Google offers for sale, sells, and/or imports the Google Home app for installation on devices (e.g., smartphones, tablets, and computers) that meet one or more claims of the '206 Patent. See, e.g., Exs. 22-23. This app is a material component of the devices that meet the one or more claims of the '206 Patent. Further, Google especially made and/or adapted this app for installation and use on devices that meet the one or more claims of the '206 Patent, and this app is not a staple article of commerce suitable for substantial noninfringing use. Google's customers then directly infringe the one or more claims of the '206 Patent by installing and/or using the Google Home app on the customers' devices.

9. Google's infringement of the '206 Patent is also willful because Google (a) had actual knowledge of the '206 Patent no later than October 2016 and actual knowledge of Sonos's infringement contentions no later than September 28, 2020 (see ¶¶ 19-29 above), (b) engaged in

the aforementioned activity despite an objectively high likelihood that Google's actions constituted infringement of the '206 Patent, and (c) this objectively defined risk was either known or so obvious that it should have been known to Google.

- 10. Additional allegations regarding Google's pre suit knowledge of the '206 Patent and willful infringement will likely have evidentiary support after a reasonable opportunity for discovery.
- 11. Sonos is in compliance with any applicable marking and/or notice provisions of 35 U.S.C. § 287 with respect to the '206 Patent.
- 12. Sonos is entitled to recover from Google all damages that Sonos has sustained as a result of Google's infringement of the '206 Patent, including, without limitation, a reasonable royalty and lost profits.
- 13. Google's infringement of the '206 Patent was and continues to be willful and deliberate, entitling Sonos to enhanced damages.
- 14. Google's infringement of the '206 Patent is exceptional and entitles Sonos to attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.
- 15. Google's infringement of the '206 Patent has caused irreparable harm (including the loss of market share) to Sonos and will continue to do so unless enjoined by this Court.

COUNT IV: INFRINGEMENT OF U.S. PATENT NO. 10,469,966

- 16. Sonos incorporates by reference and re alleges paragraphs 1-83 of this Amended Complaint as if fully set forth herein.
- 17. Google and/or users of the Google Wireless Audio System have directly infringed (either literally or under the doctrine of equivalents) and continue to directly infringe one or more of the claims of the '966 Patent, in violation of 35 U.S.C. § 271(a), by making, using, offering for sale, and/or selling the Google Wireless Audio System within the United States and/or importing the Google Wireless Audio System into the United States without authority or license.
- 18. As just one non limiting example, set forth below is an exemplary infringement claim chart for claim 1 of the '966 Patent in connection with the Google Wireless Audio System.

 This claim chart is based on publicly available information. Sonos reserves the right to modify

this claim chart, including, for example, on the basis of information about the Google Wireless Audio System that it obtains during discovery.

19. On September 28, 2020, Sonos provided Google with a draft of the original complaint prior to its filing. That draft identified the '966 Patent and described how Google's products infringed. Thus, Google had actual knowledge of Sonos's allegation that Google infringed claims of the '966 Patent prior to Sonos filing this action.

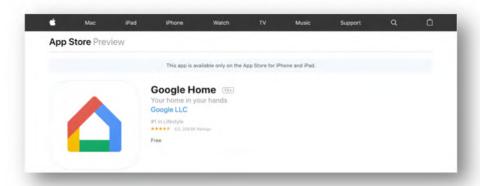
Additionally and/or alternatively, Google has indirectly infringed and continues to indirectly infringe one or more of the claims of the '966 Patent, in violation of 35 U.S.C. § 271(b), by actively inducing users of the Google Wireless Audio System to directly infringe the one or more claims of the '966 Patent. In particular, (a) Google had actual knowledge of the '966 Patent and Sonos's infringement contentions, or was willfully blind to their existence, no later than September 28, 2020 when Sonos provided Google with a copy of the complaint (see \P 19-29 17-30, 53-65, above), (b) Google intentionally causes, urges, or encourages users of the Google Wireless Audio System to directly infringe one or more claims of the '966 Patent by promoting, advertising, and instructing customers and potential customers about the Google Wireless Audio System (including uses thereof) and encouraging such customers and potential customers to engage in activity that constitutes direct infringement (see Exs. 22-23; see also citations above in the exemplary infringement claim chart for claim 1 of the '966 Patent), (c) Google knows (or should know U-V), (c) Google has continued to intentionally cause, urge, or encourage users of the Google Wireless Audio System in such a manner both since becoming aware of the '966 Patent and since Sonos told Google that such conduct was inducing infringement on September 28, 2020, (d) Google knows (or should know) and has known (or should have known) that its actions will induce users of the Google Wireless Audio System to directly infringe one or more claims the '966 Patent, and (d)-e) users of the Google Wireless Audio System directly infringe one or more claims of the '966 Patent.

101.173. For instance, at a minimum, Google has supplied and continues to supply the Google Home app to customers while knowing that installation and/or use of this app will

infringe one or more claims of the '966 Patent, and that Google's customers then directly infringe one or more claims of the '966 Patent by installing and/or using this app in accordance with Google's product literature. *See*, e.g., *id*. See, e.g., *id*. In other words, Google specifically intends to induce its customers to infringe the '966 Patent by intentionally encouraging and instructing its customers to install such software/pieces of software onto their computing devices. Example evidence of such conduct includes:



Ex. U.

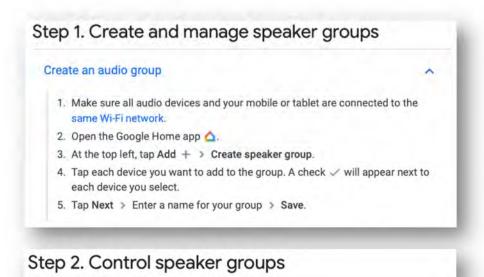


<u>Ex. V.</u>



Ex. CT.

174. Moreover, example evidence of Google encouraging and instructing its customers to use the accused speaker-group feature included in the Google Home app in an infringing manner includes:



1. Make sure your mobile device or tablet is connected to the same Wi-Fi as your speaker or display.

2. Open the Google Home app .

3. Tap your speaker group.

You'll see the following information for the current music session:

Content provider

Title (song name / show episode name / radio station program)

Artist (if available)

Collection (playlist / album / show series / radio station) (if available)

You can also pause/resume, stop, and control group members volume.

<u>Ex</u>. P.

275. Google has continued to engage in the conduct described above by way of example since it became aware of the '966 Patent and since Sonos informed Google in Sonos's December 21, 2020 infringement contentions (and each subsequent instance of amended infringement contentions) that such conduct was inducing others to directly infringe the '966 Patent. Google chose not to cease its conduct despite this. Thus, Google has engaged in this conduct with the specific intent to infringe the '966 Patent because this conduct was expressly intended to encourage users to download and install the Google Home app onto computing devices, as well as use computing devices installed with the Google Home app – the very actions that result in direct infringement of the '966 Patent.

176. Sonos has identified additional evidence of Google's inducing conduct in its infringement contentions and interrogatory responses, which Sonos incorporates herein by reference under Rule 10(c) for all purposes. *See* Exs. CH, CW.

Additionally and/or alternatively, Google has indirectly infringed and continues to indirectly infringe one or more of the claims of the '966 Patent, in violation of 35 U.S.C. § 271(c), by offering to sell or selling within the United States, and/or importing into the United States, components in connection with the Google Wireless Audio System that contribute to the direct infringement of the '966 Patent by users of the Google Wireless Audio System. In

particular, (a) Google had actual knowledge of the '966 Patent and Sonos's infringement contentions, or was willfully blind to their existence, no later than September 28, 2020 when Sonos provided Google with a copy of the complaint (see ¶19-29 above 17-30, 53-65, sabove), (b) Google offers for sale, sells, and/or imports, in connection with the Google Wireless Audio System, one or more material components of the invention of the '966 Patent that are not staple articles of commerce suitable for substantial noninfringingnon-infringing use, (c) Google knows (or should know) that such component(s) were especially made or especially adapted for use in an infringement of the '966 Patent, and (d) users of devices that comprise such material component(s) directly infringe one or more claims of the '966 Patent.

the Google Home app for installation on devices (*e.g.*, smartphones, tablets, and computers) that meet one or more claims of the '966 Patent. *See*, *e.g.*, Exs. 22 23 U-V. This app is a material component of the devices that meet the one or more claims of the '966 Patent. Further, Google especially made and/or adapted this app for installation and use on devices that meet the one or more claims of the '966 Patent, and this app is not a staple article of commerce suitable for substantial noninfringingnon-infringing use. Google's customers then directly infringe the one or more claims of the '966 Patent by installing and/or using the Google Home app on the customers' devices.

179. More specifically Google supplies a software component, the Google Home app, that includes the accused speaker-group feature as part of the Google Home app in the United States, and each time a user installs the Google Home app onto a computing device, the user "makes" an infringing device and thereby directly infringes the asserted claims of the '966 Patent under 35 U.S.C. § 271(a). The software component is a material component of infringing devices and is not a staple article or commodity of commerce suitable for substantial non-infringing use because the only possible use for these software components is to be installed and run on infringing computing devices. In other words, there is no other reasonable, suitable, or even conceivable use for these software components other than to be downloaded to and installed on computing devices, such as mobile phones or tablet computers. Because the asserted claims are

directed to capability and not actual use or performance, actual execution of software
functionality is not required. Infringement occurs as soon as the software component is
downloaded to and/or installed on the computing device. Thus, the fact that the computing device
may be capable of carrying out non-infringing functionality (in addition to being capable of
carrying out the claimed functionality) does not negate infringement and is not a non-infringing
use because infringement has already occurred as a result of the download and/or installation of
the software component onto the computing device.
180. Along with its actual knowledge of the '966 Patent, Google knew (or should have
known) that the software component was especially made or adapted for installation on infringing

180. Along with its actual knowledge of the '966 Patent, Google knew (or should have known) that the software component was especially made or adapted for installation on infringing devices and that installation of this software component by others resulted in (and continues to result in) direct infringement of the '966 Patent under 35 U.S.C. § 271(a) because each such installation "makes" a device that meets every element of claims 1-4, 6-12, 14-16 of the '966 Patent.

181. Additionally and/or alternatively, as discussed before, Google supplies a software component feature (i.e., the accused speaker-group feature as part of the Google Home app for installation onto computing devices) in the United States via software downloads. This software component feature is a material component of infringing devices and is not a staple article or commodity of commerce suitable for substantial non-infringing use because the only possible use for this software component feature is to be operated on infringing Cast-enabled computing devices. Along with its actual knowledge of the '966 Patent, Google knew (or should have known) that the software component feature was especially made or adapted to perform specific functions that are a material part of the inventions of the '966 Patent and that use of this software component feature by others involved (and continues to involve) a direct infringement of the '966 Patent under 35 U.S.C. § 271(a).

182. Moreover, as a result of Google's contributory conduct, others have directly infringed the asserted claims of the '966 Patent. For example, users have installed the supplied software components included as part of the Google Home app onto computing devices in the United States, thereby "making" infringing computing devices. As another example, after

installing the supplied software components included as part of the Google Home app onto computing devices, users have used these infringing devices, including the use of the accused speaker-group feature, which also constitutes direct infringement of the asserted claims.

183. Pursuant to 35 U.S.C. § 271(f)(1), Google has also infringed by supplying in or from the United States software and/or firmware components, which constitute substantial portions of the components of Sonos's patented inventions, and actively, knowingly, and intentionally induced (and continues to actively, knowingly, and intentionally induce) others outside of the United States to combine these software and/or firmware components in a manner that, if such combination would have occurred in the United States (as it does pursuant to the theories set forth above), infringes the asserted claims of the '966 Patent. And these combinations by those outside of the United States do in fact occur. Accordingly, by supplying such software and/or firmware components from the United States, Google is liable for infringement under 35 U.S.C. § 271(f)(1).

184. Despite knowing of the '966 Patent, Google supplies the Google Home app from the United States to various entities outside the United States. Google then induces those entities to combine the Google Home app in a manner that would, if combined within the United States, constitute infringement. Google has actively, knowingly, and intentionally induced (and continues to actively, knowingly, and intentionally induce) these entities to make such combinations outside the United States in various ways, in violation of 35 U.S.C. § 271(b).

185. For example, through Google's website, advertising and promotional material, user guides, and/or the Google Play Store, and via audible or visual instructions emitted from or displayed on the Cast-enabled media players and Cast-enabled displays, Google has actively, knowingly, and intentionally encouraged and induced (and continues to actively, knowingly, and intentionally encourage and induce) others outside the United States to install the Google Home app onto computing devices outside the United States. If this combination were done within the United States, that act would constitute "mak[ing]" an infringing device, which constitutes direct infringement of claims 1-4, 6-12, 14-16 of the '966 Patent under 35 U.S.C. § 271(a). See, e.g., Ex. CU (https://support.google.com/store/answer/2462844?hl=en, indicating the countries in

which Google's media players can be purchased and operated and thus, the countries in which Google encourages its users to download and install the Google Home app).

186. As another example, through Google's relationship with entities (including affiliated entities) that operate servers outside of the United States that host the Google Home app for download onto smartphone, tablet, and computer devices, Google actively, knowingly, and intentionally encourages and induces or instructs these entities to load, store, or otherwise provide the Google Home app onto these servers. For instance, Google operates data centers and download servers in countless foreign countries and regions.

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See Ex. CR (https://cloud.google.com/about/locations#regions). In at least these foreign countries and regions, users are able to download the Google Home app onto computing devices. To facilitate this, Google has intentionally encouraged and induced or instructed other entities (including Google's affiliated entities) to upload software packages constituting the Google Home app onto download servers that are located in foreign countries. If this combination were done within the United States, that act would constitute direct infringement of certain asserted claims of the '966 Patent (e.g., claims 9-12 and 14-16) by "mak[ing]" and/or "us[ing]" servers that host such software in violation of 35 U.S.C. § 271(a).

187. On information and belief, Google engages in the same conduct set out above (with respect to Google's infringement under § 271(b)) in foreign countries and with the intent to

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27 28 encourage users in foreign countries to download and install the Google Home app onto computing devices.

188. Pursuant to 35 U.S.C. § 271(f)(2), Google has also infringed by supplying software components in or from the United Sates to be combined, installed, loaded, and/or used by others outside of the United States, where these software components are components of the patented inventions that have no substantial non-infringing use and are not staple articles or commodities of commerce – with knowledge that these software components were especially made or adapted for use and an intent that these software components would be combined, installed, loaded, and/or used outside the United States such that, if such combination, installation, load, and/or use occurred within the United States (as it does pursuant to the theories set forth above), it would infringe the asserted claims of the Asserted Patents. And these combinations by those outside of the United States do in fact occur. Accordingly, by supplying such software components in or from the United States, Google is liable for infringement under 35 U.S.C. § 271(f)(2).

- Despite knowing of the '966 Patent, Google supplies software components for performing the accused functionality as part of the Google Home app in or from the United States to various entities outside the United States. Google knows and intends for those entities to combine the software components in a manner that would, if combined within the United States, constitute infringement because each combination or installation of the Google Home app onto a computing device would constitute "mak[ing]" an infringing device and thus directly infringe claims 1-4, 6-12, 14-16 of the '966 Patent under 35 U.S.C. § 271(a).
- 190. Google knows that the software components included in the Google Home app are material components of infringing devices that are not staple articles or commodities of commerce suitable for substantial non-infringing use because the only possible use for these software components is to be installed and run on infringing computing devices.
- 191. Along with its actual knowledge of the '966 Patent, Google knew (or should have known) that the software components included in the Google Home app were especially made or adapted for installation on infringing devices, and that installation of these software components

1	and, for other time periods, had actual knowledge of the '966 Patent. Further, this knowledge and
2	repeated and persistent disclosure establishes that Google, for some time periods, had at least
3	failed to investigate whether it infringed the '966 Patent despite the existence of a high risk of
4	infringement and, for other time periods, had actual knowledge of a credible and specific
5	allegation of infringement of the '966 Patent.
6	405.196. Additional allegations regarding Google's pre-suit knowledge of the '966
7	Patent and willful infringement will likely have evidentiary support after a reasonable opportunity
8	for discovery.
9	106.197. Sonos is in compliance with any applicable marking and/or notice
10	provisions of 35 U.S.C. § 287 with respect to the '966 Patent.
11	107.198. Sonos is entitled to recover from Google all damages that Sonos has
12	sustained as a result of Google's infringement of the '966 Patent, including, without limitation, a
13	reasonable royalty and lost profits.
14	Google's infringement of the '966 Patent was and continues to be willful
15	and deliberate, entitling Sonos to enhanced damages.
16	Google's infringement of the '966 Patent is exceptional and entitles Sonos
17	to attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.
18	410.201. Google's infringement of the '966 Patent has caused irreparable harm
19	(including the loss of market share) to Sonos and will continue to do so unless enjoined by this
20	Court.
21	COUNT VCLAIM IV: INFRINGEMENT OF U.S. PATENT NO. 10,848,885
22	Sonos incorporates by reference and re-alleges paragraphs 1-83201 of this
23	Amended Complaint as if fully set forth herein.
24	Google and/or users of the Google Wireless Audio System have directly
25	infringed (either literally or under the doctrine of equivalents) and continue to directly infringe
26	one or more of the claims of the '885 Patent, in violation of 35 U.S.C. § 271(a), by making, using
27	offering for sale, and/or selling the Google Wireless Audio System within the United States
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and/or importing the Google Wireless Audio System into the United States without authority or license.

20. As just one non limiting example, set forth below is an exemplary infringement claim chart for claim 1 of the '885 Patent in connection with the Google Wireless Audio System. This claim chart is based on publicly available information. Sonos reserves the right to modify this claim chart, including, for example, on the basis of information about the Google Wireless Audio System that it obtains during discovery.

204. In the course of this litigation, Sonos has served Google with infringement contentions detailing Google's infringement of the '885 Patent. See Ex. CH; Ex. CL. In particular, as set forth in Sonos's infringement contentions for the '885 Patent, Google's Castenabled media players are provisioned with software enabling a "speaker group" feature such that each limitation of at least one of the asserted claims of the '885 Patent is satisfied. For the avoidance of doubt, Sonos incorporates herein by reference under Rule 10(c) these infringement contentions for all purposes.

113.205. On January 8, 2021, Sonos provided Google with a draft of this Sonos's

First Amended Complaint prior to its filing. That draft identified the '885 Patent and described how Google's products infringed. Thus, Google had actual knowledge of Sonos's allegation that Google infringed claims of the '885 Patent prior to Sonos filing the amended complaint in this

20 | action.

Additionally and/or alternatively, Google has indirectly infringed and continues to indirectly infringe one or more of the claims of the '885 Patent, in violation of 35 U.S.C. § 271(b), by actively inducing users of the Google Wireless Audio System to directly infringe the one or more claims of the '885 Patent. In particular, (a) Google had actual knowledge of the '885 Patent and Sonos's infringement contentions, or was willfully blind to their existence, no later than January 8, 2021 when Sonos provided Google with a copy of the First Amended Complaint, (b) Google intentionally causes, urges, or encourages users of the Google Wireless Audio System to directly infringe one or more claims of the '885 Patent by

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promoting, advertising, and instructing customers and potential customers about the Google Wireless Audio System (including uses thereof) and encouraging such customers and potential customers to engage in activity that constitutes direct infringement (see Exs. 22 23; see also citations above in the exemplary infringement claim chart for claim 1 of the '885 Patent), (c) Google knows (or should know U-V), (c) Google has continued to intentionally cause, urge, or encourage users of the Google Wireless Audio System in such a manner both since becoming aware of the '885 Patent and since Sonos told Google that this conduct was inducing infringement on February 17, 2021, (d) Google knows (or should know) and has known (or should have known) that its actions will induce users of the Google Wireless Audio System to directly infringe one or more claims the '885 Patent, and (d)-e) users of the Google Wireless Audio System directly infringe one or more claims of the '885 Patent. For instance, at a minimum, Google has supplied and continues to supply the Chromecast enabled media players to customers while knowing that use of these products will infringe one or more claims of the '885 Patent and that Google's customers then directly infringe one or more claims of the '885 Patent by using the Chromecast enabled media players in accordance with Google's product literature. See, e.g., id. 207. For example, at a minimum, Google has supplied and continues to supply the Cast-enabled media players to customers while knowing that use of these products will infringe one or more claims of the '885 Patent and that Google's customers then directly infringe one or more claims of the '885 Patent by using the Cast-enabled media players in accordance with Google's product literature. See, e.g., id. In other words, Google specifically intends to induce its customers to infringe the 885 Patent by intentionally encouraging and instructing its customers to use the Cast-enabled media players, including the use of the accused speaker-group feature, which constitutes direct infringement. Example evidence of such conduct can be found at paragraph 174. 208. As another example, at a minimum, Google has supplied and continues to supply software (e.g., firmware updates) for installation onto Cast-enabled media players to customers while knowing that installation of this software will infringe one or more claims of the '885 Patent and that Google's customers then directly infringe one or more claims of the '885 Patent

by installing the software. In other words, Google specifically intends to induce its customers to infringe the '885 Patent by intentionally encouraging and instructing its customers to install such software onto their Cast-enabled media players. When users install such software, including firmware updates, these users make an infringing device pursuant to § 271(a) and thus commit direct infringement of the '855 Patent. Example evidence of such conduct includes:

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Locate firmware version & settings

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Your speaker or display must be set up and connected to the internet to receive the firmware update.

Firmware is the software installed on Google Nest or Home speaker or display. When a firmware update is available, your device will automatically download the update via an Over-the-Air (OTA) update.

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Ex. CN.

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Updates to Google Nest or Home speakers and displays

To enjoy the latest and greatest features available on Google Nest or Home speaker or display, your device may need to be updated to the most recent software version. This is done automatically as part of setup so there's nothing you need to do to get the update.

supply the Cast-enabled media players to distributors (e.g., Best Buy, Walmart, etc.) that then sell

or offer to sell the Cast-enabled media players while knowing that selling and offering to sell the

distributors then directly infringe one or more claims of the '885 Patent by selling and offering to

distributors to sell or offer to sell Cast-enabled media players. Example evidence of such conduct

Cast-enabled media players infringes one or more claims of the '885 Patent and that Google's

sell the Cast-enabled media players. In other words, Google specifically intends to induce its

distributors to infringe the '885 Patent by intentionally encouraging and instructing its

As yet another example, at a minimum, Google has supplied and continues to

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Ex. CO.

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includes:

Ex. CV.

210. Google has continued to engage in the conduct described above by way of example since it became aware of the '885 Patent and since Sonos informed Google in Sonos's February 17, 2021 infringement contentions (and each subsequent instance of amended infringement contentions) that such conduct was inducing others to directly infringe the '885 Patent. Google chose not to cease its conduct despite this. Thus, Google has engaged in this conduct with the specific intent to infringe the '885 Patent because this conduct was expressly intended to encourage users to use the Cast-enabled media players, users to install firmware updates onto Cast-enabled media players thus constituting making an infringing device, and distributors to sell and offer to sell Cast-enabled media players – the very actions that result in direct infringement of the '885 Patent.

Additionally and/or alternatively, Google has indirectly infringed and continues to indirectly infringe one or more of the claims of the '885 Patent, in violation of 35 U.S.C. § 271(c), by offering to sell or selling within the United States, and/or importing into the United States, components in connection with the Google Wireless Audio System that contribute to the direct infringement of the '885 Patent by users of the Google Wireless Audio System. In

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particular, (a) Google had actual knowledge of the '885 Patent and Sonos's infringement contentions, or was willfully blind to their existence, no later than January 8, 2021 when Sonos provided Google with a copy of the First Amended Complaint, (b) Google offers for sale, sells, and/or imports, in connection with the Google Wireless Audio System, one or more material components of the invention of the '885 Patent that are not staple articles of commerce suitable for substantial noninfringing use, (c) Google knows (or should know) that such component(s) were especially made or especially adapted for use in an infringement of the '885 Patent, and (d) users of devices that comprise such material component(s) directly infringe one or more claims of the '885 Patent. For instance, at a minimum, Google offers for sale, sells, and/or imports software updates for the Chromecast-enabled media players that meet one or more claims of the '885 Patent. See, e.g., Ex. 43 AO. These software updates are material components of the Chromecast-enabled media players that meet the one or more claims of the '885 Patent. Further, Google especially made and/or adapted these software updates for installation and use on the Chromecast-enabled media players that meet the one or more claims of the '885 Patent, and these software updates are not staple articles of commerce suitable for substantial noninfringingnoninfringing use. Google's customers then directly infringe the one or more claims of the '885 Patent by installing and using software updates on the Chromecast-enabled media players.

212. More specifically, Google supplies software components, such as firmware updates, that include the accused speaker-group feature as part of software updates for Castenabled media players in the United States, and each time a user installs such a firmware update, the user "makes" an infringing device and thereby directly infringes claims 1-3, 5-10, 12-14 of the '885 Patent under 35 U.S.C. § 271(a). The software components included in the firmware updates are material components of Cast-enabled media players that are not staple articles or commodities of commerce suitable for substantial non-infringing use because the only possible use for these software components is to be installed and run on infringing Cast-enabled media players. In other words, there is no other reasonable, suitable, or even conceivable use for these software components other than to be downloaded to and installed on Cast-enabled media players. Because the asserted claims are directed to capability and not actual use or performance,

actual execution of software functionality is not required. Infringement occurs as soon as the software component is downloaded to and/or installed on the Cast-enabled media player. Thus, the fact that the Cast-enabled media player may be capable of carrying out non-infringing functionality (in addition to being capable of carrying out the claimed functionality) does not negate infringement and is not a non-infringing use because infringement has already occurred as a result of the download and/or installation of the software component onto the Cast-enabled media player.

- 213. Along with its actual knowledge of the '885 Patent, Google knew (or should have known) that the software components included in the firmware updates were especially made or adapted for installation on infringing Cast-enabled media players and that installation of these software components by others resulted in (and continues to result in) direct infringement of the '885 Patent under 35 U.S.C. § 271(a) because each such installation "makes" an updated Cast-enabled media player that meets every element claims 1-3, 5-10, 12-14 of the '885 Patent.
- 214. Additionally and/or alternatively, as discussed before, Google supplies a software component feature (i.e., the accused speaker-group feature as part of the Cast-enabled media player's firmware) in the United States via software downloads. This software component feature is a material component of infringing devices and is not a staple article or commodity of commerce suitable for substantial non-infringing use because the only possible use for this software component feature is to be operated on infringing Cast-enabled media players. Along with its actual knowledge of the '885 Patent, Google knew (or should have known) that the software component feature was especially made or adapted to perform specific functions that are a material part of the inventions of the '885 Patent and that use of this software component feature by others involved (and continues to involve) a direct infringement of the '885 Patent under 35 U.S.C. § 271(a).
- 215. Moreover, as a result of Google's contributory conduct, others have directly infringed the asserted claims of the '885 Patent. For example, users have installed the supplied software components included as part of the firmware updates onto Cast-enabled media players in the United States, thereby "making" updated Cast-enabled media players, which constitutes direct

infringement. As another example, after installing the software components included as part of the firmware updates onto Cast-enabled media players, users have used Cast-enabled media players, including the use of the accused speaker-group feature, which also constitutes direct infringement of the asserted claims.

216. Pursuant to 35 U.S.C. § 271(f)(1), Google has also infringed by supplying in or from the United States software and/or firmware components, which constitute substantial portions of the components of Sonos's patented inventions, and actively, knowingly, and intentionally induced (and continues to actively, knowingly, and intentionally induce) others outside of the United States to combine these software and/or firmware components in a manner that, if such combination would have occurred in the United States (as it does pursuant to the theories set forth above), infringes the asserted claims of the '885 Patent. And these combinations by those outside of the United States do in fact occur. Accordingly, by supplying such software and/or firmware components from the United States, Google is liable for infringement under 35 U.S.C. § 271(f)(1).

217. Despite knowing of the '885 Patent, Google supplies from the United States software components for performing the accused functionality as part of firmware updates for accused media players. Google then through Google's website, advertising and promotional material, user guides, the Google Home app (among other apps offered by Google), and/or the Google Play Store, Google has actively, knowingly, and intentionally encouraged and induced (and continues to actively, knowingly, and intentionally encourage and induce) others outside the United States to install firmware updates onto accused media players outside the United States. If this combination were done within the United States, that act would constitute "mak[ing]" or "us[ing]" an infringing device, which constitutes direct infringement of the asserted claims of the '885 Patent under 35 U.S.C. § 271(a). See, e.g., Ex. CU

(https://support.google.com/store/answer/2462844?hl=en, indicating the countries in which Google encourages its users to install firmware updates to the media players).

- 218. As another example, through Google's relationship with third-party manufacturers, third-party distributers, or via an otherwise affiliated entity that acts in a manufacturer or distributor role, Google actively, knowingly, and intentionally encourages and induces or instructs such parties to, outside of the United States, install or load firmware onto Cast-enabled media players. If this combination were done within the United States, that act would constitute "mak[ing]" an infringing device, which constitutes direct infringement of claims 1-3, 5-10, 12-14 of the '885 Patent under 35 U.S.C. § 271(a).
- 219. On information and belief, Google engages in the same conduct set out above (with respect to Google's infringement under § 271(b)) in foreign countries and with the intent to encourage users in foreign countries to download and install firmware updates onto Cast-enabled media players in those countries.
- 220. Pursuant to 35 U.S.C. § 271(f)(2), Google has also infringed by supplying software components in or from the United Sates to be combined, installed, loaded, and/or used by others outside of the United States, where these software components are components of the patented inventions that have no substantial non-infringing use and are not staple articles or commodities of commerce with knowledge that these software components were especially made or adapted for use and an intent that these software components would be combined, installed, loaded, and/or used outside the United States such that, if such combination, installation, load, and/or use occurred within the United States (as it does pursuant to the theories set forth above), it would infringe the asserted claims of the '885 Patent. And these combinations by those outside of the United States do in fact occur. Accordingly, by supplying such software components in or from the United States, Google is liable for infringement under 35 U.S.C. § 271(f)(2).
- 221. Despite knowing of the '885 Patent, Google supplies in or from the United States software components for performing the accused functionality as part of firmware updates for accused media players, and users install such a firmware update outside of the United States in a manner that, if done within the United States, would constitute "mak[ing]" an infringing device and thereby directly infringe claims 1-3, 5-10, 12-14 of the '885 Patent under 35 U.S.C. § 271(a).

The software components included in the firmware updates are material components of the patented invention that are not staple articles or commodities of commerce suitable for substantial non-infringing use because the only possible use for these software components is to be installed and run on accused media players, which constitute infringing devices.

- Along with its actual knowledge of the '885 Patent, Google knew (or should have known) that the software components included in the firmware updates were especially made or adapted for installation on accused media players, and that installation of these software components by others outside the United States would, if done within the United States, have resulted in (and continues to result in) direct infringement of the '885 Patent under 35 U.S.C. § 271(a) because each such installation "makes" an updated player that meets every element of every asserted claims.
- 223. Moreover, as a result of Google providing such firmware updates others have outside of the United States combined the firmware updates in a manner that, if done within the United States, would constitute direct infringement of claims 1-3, 5-10, 12-14 of the '885 Patent.

 For example, users have, outside of the United States, installed the supplied software components included as part of the firmware updates onto accused media players outside the United States, which if done within the United States would constitute "making" updated Cast-enabled media players, which constitutes direct infringement.
- 224. As another example, Google provides firmware to manufacturers, third-party distributers, or an otherwise affiliated entity that acts in a manufacturer or distributor role, who then, outside of the United States installs or loads such firmware onto accused media players. If this combination were done within the United States, that act would constitute "mak[ing]" an infringing device, which constitutes direct infringement of claims 1-3, 5-10, 12-14 of the '885 Patent under 35 U.S.C. § 271(a). See also Ex. CH (Sonos's infringement contentions).
- 225. Sonos has identified additional evidence of Google's inducing conduct in its infringement contentions and interrogatory responses, which Sonos incorporates herein by reference under Rule 10(c) for all purposes. See Exs. CH, CW.

Google's infringement of the '885 Patent is also willful because Google
(a) had actual knowledge of the '885 Patent and actual knowledge of Sonos's infringement
contentions no later January 8, 2021 when Sonos provided Google with a copy of the Amended
Complaint, (b) engaged in the aforementioned activity despite an objectively high likelihood that
Google's actions constituted infringement of the '885 Patent, and (c) this objectively-defined risk
was either known or so obvious that it should have been known to Google. <u>See, e.g.,</u> ¶ 17-30,
<u>53-65, above.</u>
227. Given the five-year period over which Sonos put Google on consistent and
repeated notice of Sonos's patents and the breadth of Sonos's patent portfolio concerning
specifically the products accused in this case, detailed above, this knowledge establishes that
Google was, for some time periods, at least willfully blind to the fact that the '885 Patent existed
and, for other time periods, had actual knowledge of the '885 Patent. Further, this knowledge and
repeated and persistent disclosure establishes that Google, for some time periods, had at least
failed to investigate whether it infringed the '885 Patent despite the existence of a high risk of
infringement and, for other time periods, had actual knowledge of a credible and specific
allegation of infringement of the '885 Patent.
Additional allegations regarding Google's pre-suit knowledge of the '885
Patent and willful infringement will likely have evidentiary support after a reasonable opportunity
for discovery.
Sonos is entitled to recover from Google all damages that Sonos has
sustained as a result of Google's infringement of the '885 Patent, including, without limitation, a
reasonable royalty and lost profits.
230. Sonos is in compliance with any applicable marking and/or notice provisions of 35
U.S.C. § 287 with respect to the '885 Patent.
Google's infringement of the '885 Patent was and continues to be willful
and deliberate, entitling Sonos to enhanced damages.
Google's infringement of the '885 Patent is exceptional and entitles Sonos
to attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

1 121.233. Google's infringement of the '885 Patent has caused irreparable harm 2 (including the loss of market share) to Sonos and will continue to do so unless enjoined by this 3 Court. 4 **PRAYER FOR RELIEF** 5 WHEREFORE, Sonos respectfully requests: 6 That Judgment be entered that Google has infringed at least one or more claims of 7 the patents-in-suit, directly and/or indirectly, literally and/or under the doctrine of 8 equivalents, and that such infringement is willful; 9 An injunction enjoining Google, its officers, agents, servants, employees and В. 10 attorneys, and other persons in active concert or participation with Google, and its 11 parents, subsidiaries, divisions, successors and assigns, from further infringement of 12 the patents-in-suit. 13 C. An award of damages sufficient to compensate Sonos for Google's infringement 14 under 35 U.S.C. § 284, including an enhancement of damages on account of 15 Google's willful infringement; 16 That the case be found exceptional under 35 U.S.C. § 285 and that Sonos be awarded D. 17 its reasonable attorneys' fees; 18 Costs and expenses in this action; 19 An award of prejudgment and post-judgment interest; and 20 Such other and further relief as the Court may deem just and proper. 21 **DEMAND FOR JURY TRIAL** 22 Pursuant to Rule 38(b) of the Federal Rules of Civil Procedure, Sonos respectfully demands 23 a trial by jury on all issues triable by jury. 24 25 26 27 28

(ase 3:21-cv-07559-WHA	Document 159-9	Filed 03/30/22 Page 81 of 149
1 2 3 4	Dated: March 30, 2022		ORRICK, HERRINGTON & SUTCLIFFE LLP and LEE SULLIVAN SHEA & SMITH LLP By: /s/ Cole B. Richter Cole B. Richter (admitted pro hac)
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6	Dated:	Respectfully s	ubmitted,
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28			George I. Lee (pro hac vice)

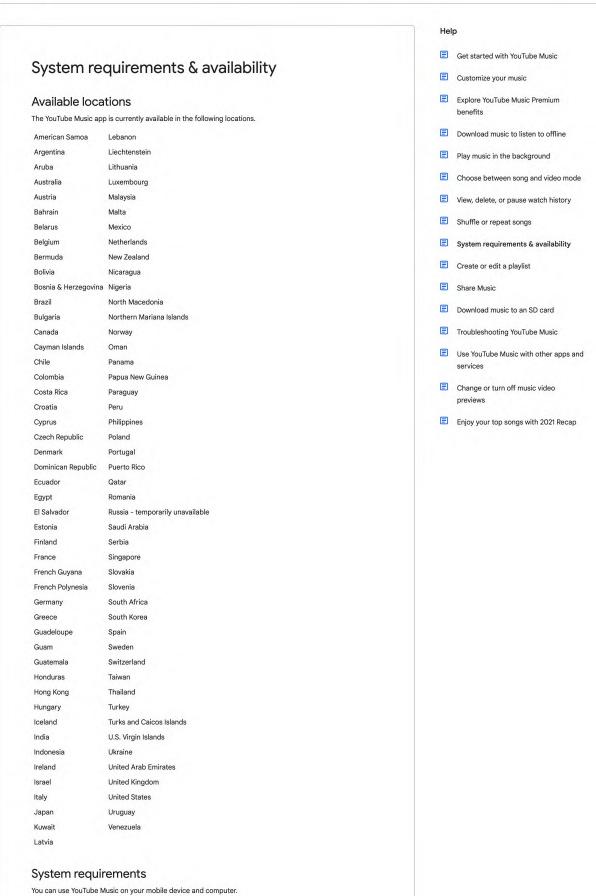
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EXHIBIT CM





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Computer Android iPhone & iPad

Android phones: Android phones and tablets running version 4.4 or above.

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EXHIBIT CN

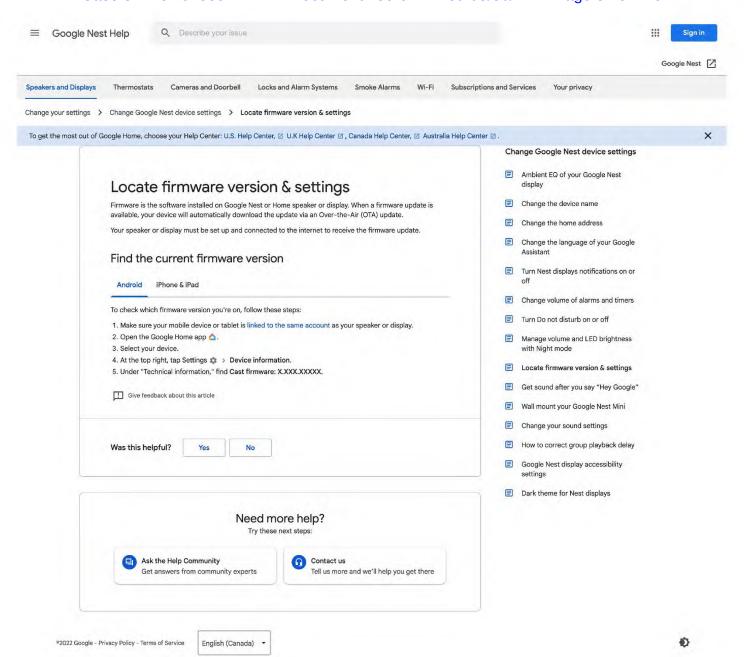


EXHIBIT CO

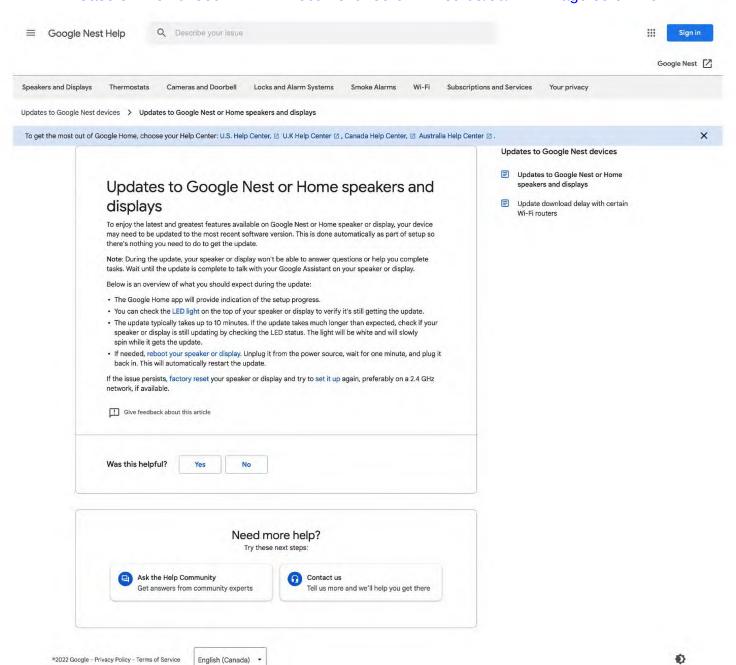
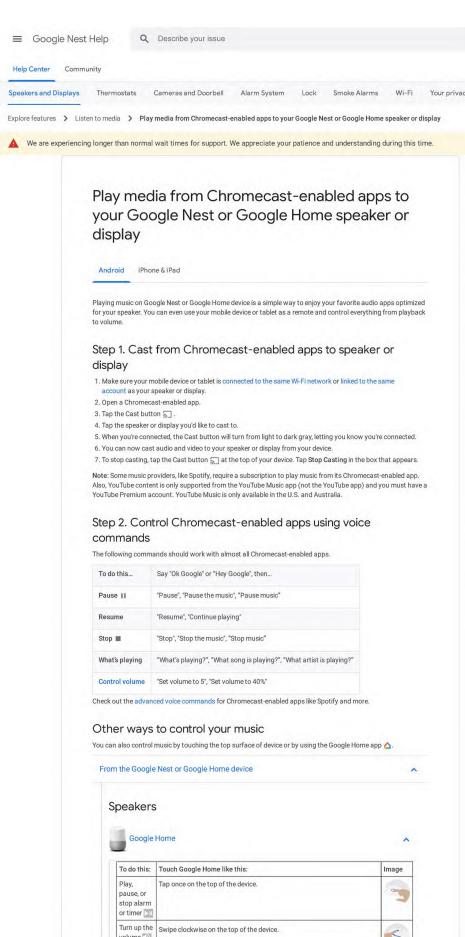
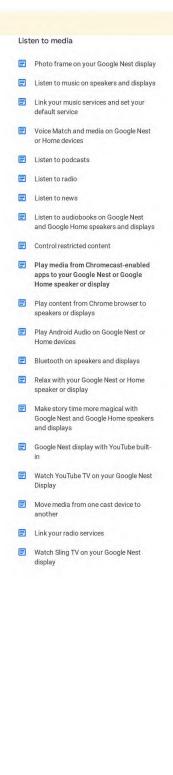


EXHIBIT CP





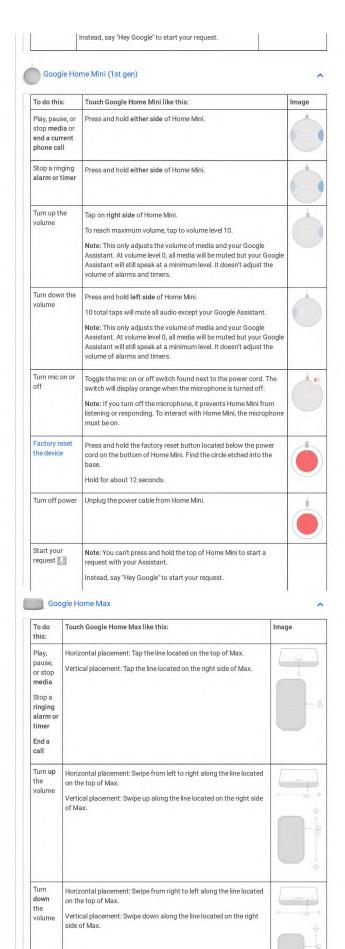
Google Nest

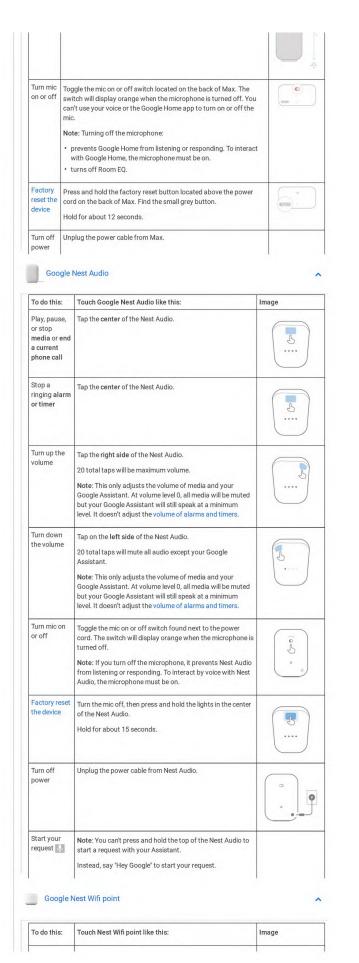
	Note: This only adjusts the volume of media. You can adjust alarms and timers volume anytime in the Google Home app.	
Turn down the volume	Swipe counterclockwise on the top of the device. Note: This only adjusts the volume of media and your Google Assistant. At volume level 0, all media will be muted but your Google Assistant will still speak at a minimum level. It doesn't adjust the volume of alarms and timers.	5
Start your request U	Press and hold down on the top of the device.	-
Mic on or off	Press the microphone mute button on the back of the device. Note: If you mute the microphone, it prevents Google Home from listening or responding. To interact with Google Home, the microphone must be on.	9
Factory reset the device	Press and hold the factory reset button located on the back of Google Home.	G
Turn off power	Unplug power cable from Google Home.	

Google Nest Mini (2nd gen)

Note: The Google Nest Mini (2nd gen) has a wall mount screw slot on the back. If your device doesn't

To do this:	Touch Google Nest Mini like this:	Image
Play, pause, or stop media or end a current phone call	Tap the center of the Nest Mini.	
Stop a ringing alarm or timer	Tap the center of the Nest Mini.	
Turn up the volume	Tap the right side of the Nest Mini. 10 total taps will be maximum volume. Note: This only adjusts the volume of media and your Google Assistant. At volume level 0, all media will be muted but your Google Assistant will still speak at a minimum level. It doesn't adjust the volume of alarms and timers. To reverse controls, open the Home app > tap your device > Settings > Reverse device controls.	
Turn down the volume	Tap on the left side of the Nest Mini. 10 total taps will mute all audio except your Google Assistant. Note: This only adjusts the volume of media and your Google Assistant. At volume level 0, all media will be muted but your Google Assistant will still speak at a minimum level. It doesn't adjust the volume of alarms and timers. To reverse controls, open the Home app > tap your device > Settings > Reverse device controls.	
Turn mic on or off	Toggle the mic on or off switch found next to the power cord. The switch will display orange when the microphone is turned off. Note: If you turn off the microphone, it prevents Nest Mini from listening or responding. To interact by voice with Nest Mini, the microphone must be on.	
Factory reset the device	Turn the mic off, then press and hold the lights in the center of the Nest Mini. Hold for about 15 seconds.	
Turn off power	Unplug the power cable from Nest Mini.	
Start your request U	Note: You can't press and hold the top of the Nest Mini to start a request with your Assistant.	





Play, pause, or stop media or end a current phone call	Tap the center of the Nest Wifi point.	
Stop a ringing alarm or timer	Tap the center of the Nest Wifi point.	
Turn up the volume	Tap on the right side of the Nest Wifi point. 10 total taps will be maximum volume. Note: This only adjusts the volume of media and your Google Assistant. At volume level (), all media will be muted but your Google Assistant will still speak at a minimum level. It doesn't adjust the volume of alarms and timers	
Turn down the volume	Tap on the left side of the Nest Wifi point. 10 total taps will mute all audio except your Google Assistant. Note: This only adjusts the volume of media and your Google Assistant. At volume level 0, all media will be muted but your Google Assistant will still speak at a minimum level. It doesn't adjust the volume of alarms and timers.	
Turn mic on or off	Toggle the mic on or off switch found next to the power cord. The switch will display orange when the microphone is turned off. Note: If you turn off the microphone, it prevents Nest Wifi point from listening or responding. To interact by voice with your Nest Wifi point, the microphone must be on.	
Turn off power	Unplug the power cable from Nest Wifi point.	
Start your request U	Note: You can't press and hold the top of a Nest Wifi point to start a request with your Assistant. Instead, say "Hey Google" to start your request.	

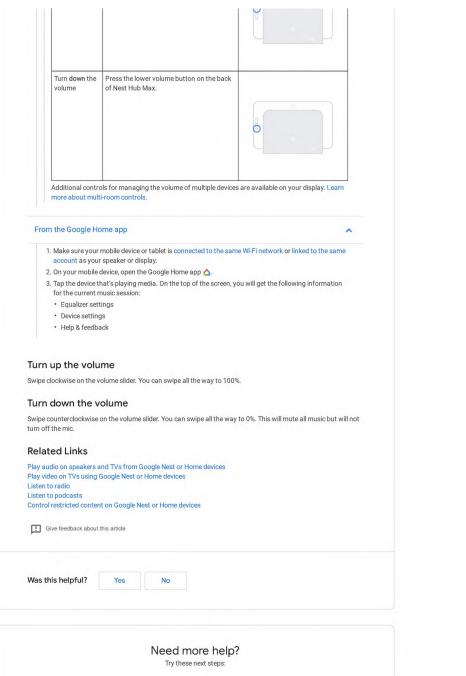


To do this:	Touch Google Nest Hub like this:	Image
Turn up the volume	Press the upper volume button on the back of Google Nest Hub.	
Turn down the volume	Press the lower volume button on the back of Google Nest Hub.	

Additional controls for managing the volume of multiple devices are available on your display. Learn more about multi-room controls.



To do this:	Touch Nest Hub Max like this:	Image
Turn up the volume	Press the upper volume button on the back of Nest Hub Max.	



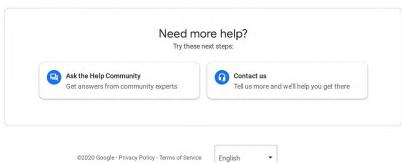
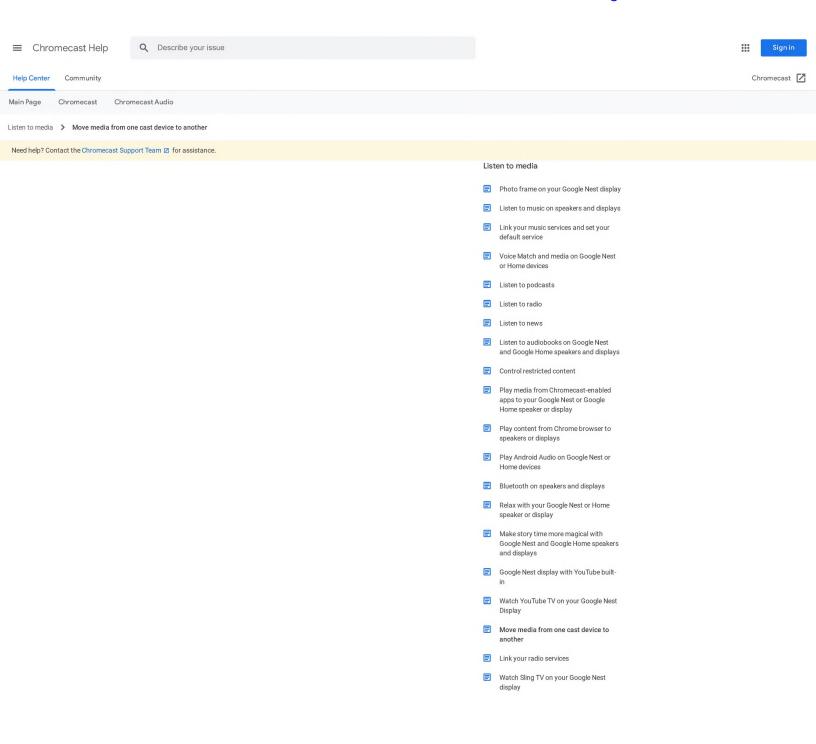
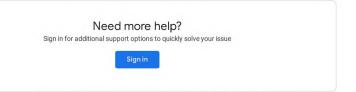


EXHIBIT CQ



Move media from one cast device to another Move music, podcasts, radio, and YouTube videos currently streaming from your Google Nest, Google Home, or Chromecast device to another Nest speaker, speaker group, display, or Chromecast-connected device. Devices you can transfer media to and from • Google Home, Google Nest Mini (2nd gen), Google Home Mini (1st gen), Google Home Max, Google Nest Audio Google Nest Hub or Google Nest Hub Max • Chromecast with Google TV, Chromecast (2nd or 3rd gen), Chromecast Ultra, or Chromecast Audio · Speaker groups Supported media · Any audio (except news and media playing via Bluetooth) · YouTube for videos With the Google Assistant Here are some ways to talk with your Google Assistant on your speaker or display when moving media from one device to another. Note: This feature is currently only available in English. Say "Ok Google" or "Hey Google," then: Transfer media to another device "Transfer to <device name>" "Move the music to <device name>" "Cast to <device name>" From your Nest display Google Nest Hub 1. On your Nest Hub's Home screen, tap the active media card to bring up the media player. 2. At the bottom left corner of the screen, tap Devices $\overline{\mathbb{A}}$ to find the list of available devices and 3. Select the device(s) you want to move your media to. 4. Deselect the device(s) you want to move your media from. Google Nest Hub Max 1. On your Nest Hub Max's Home screen, tap the active media card to bring up the media player. 2. At the bottom left corner of the screen, tap Devices 5 to find the list of available devices and 3. Select the device(s) you want to move your media to. 4. Deselect the device(s) you want to move your media from. Android iPhone & iPad From the Google Home app 1. Make sure your mobile device or tablet is connected to the same Wi-Fi or linked to the same account as your Chromecast, or speaker or display. 2. Open the Google Home app 🛆. $3. \ Tap\ Media\ {}_{il1}.\ A\ controller\ for\ what's\ currently\ playing\ should\ appear.\ If\ there\ are\ multiple\ things\ playing\ in\ the$ home, scroll to the controller you want. $4. \, Select \, the \, device(s) \, you \, want \, to \, move \, your \, media \, to. \, If \, you \, have \, more \, than \, 3 \, devices \, in \, your \, home, tap \, \textbf{More}$ devices v to display all of your devices. 5. Uncheck the device(s) you want to move your media from ! Give feedback about this article Was this helpful?



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EXHIBIT CR

Cloud locations

Google Cloud has added a new region: Santiago. Our private, software-defined network provides fast and reliable connections to users around the world.

Contact sales (/contact)

Free trial (https://console.cloud.google.com/freetrial)









COMING SOON! Google Cloud will continue expanding into the following regions: Doha (Qatar), Paris (France), Milan (Italy), Madrid (Spain), Turin (Italy), Columbus (US), Berlin (Germany), Dammam (Kingdom of Saudi Arabia), Dallas (Texas), and Tel Aviv (Israel).

Meet our network

REGIONS NETWORK (#NETWORK) (#REGIONS)



*Exception: region has 4 zones.

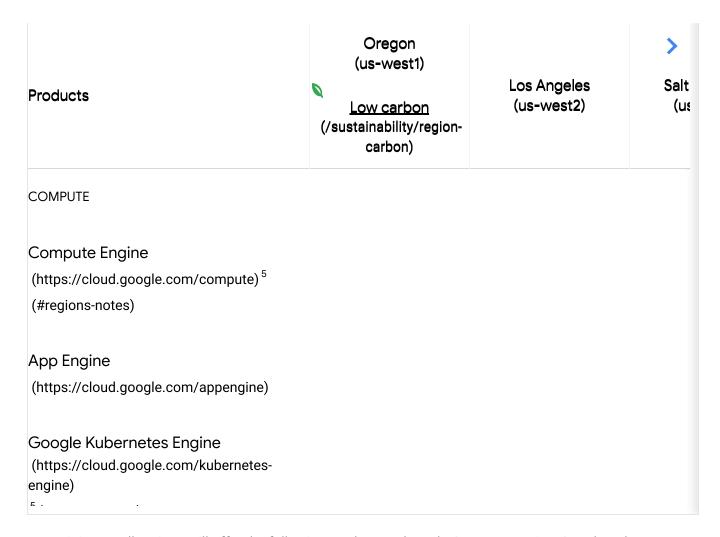
Products available by location

Deploy resources in specific zones, regions and multi-regions.

AMERICAS EUROPE (#EUROPE) (#AMERICAS)

ASIA PACIFIC (#ASIA-PACIFIC)

MULTI-REGION (#MULTI-REGION)



At a minimum, all regions will offer the following products at launch: Compute Engine, Google Kubernetes Engine, Cloud Storage, Persistent Disk, CloudSQL, Virtual Private Cloud, Key Management System, Cloud Identity and Secret manager. This minimum product group will continue to evolve based on customer demand. Typically, within three months of a new region launch, additional products are made available based on customer demand.

The above product availability is updated on a monthly basis. To request additional products for a specific location or to discuss product availability, please **contact us** (/contact).

- 1. Service is offered with a global location option in addition to region locations denoted.
- 2. Service is offered with multi-region location options in addition to region locations denoted. Check multi-region tab for details.
- 3. Service is offered with varying functionality by region.
- 4. Service is the next generation of Datastore. Available in either Datastore mode or Native mode.
- 5. Service provides a data location commitment in the Service Specific Terms for available regions/multi-regions.

Global products

The following products are available with no dependence on location.

NETWORKING Cloud Load Balancing (/load-balancing) Cloud CDN (/cdn) Cloud Interconnect (/network-connectivity/docs/interconnect) Cloud DNS (/dns) Cloud Armor (/armor) Network Intelligence Center (/network-intelligence-center) Traffic Director (/traffic-director) DATA ANALYTICS Data Studio (https://datastudio.google.com) Datalab (/datalab) MANAGEMENT TOOLS Cloud Recommendations API (/recommendations) Cloud Deployment Manager (/deployment-manager) Cloud Endpoints (/endpoints) Cloud Shell (/shell)

Cloud Billing API (/billing/docs)
Resource Manager (/resource-manager)

OPERATIONS

Cloud Monitoring (/monitoring) (#global-products-notes)

Cloud Trace (/trace)

Cloud Profiler (/profiler/docs)

Cloud Debugger (/debugger/docs)

Error Reporting (/error-reporting)

DEVELOPERS TOOLS

Cloud Source Repositories (/source-repositories)

Cloud Build (/build)

SECURITY

Cloud Data Loss Prevention (/dlp)

Security Command Center (/security-command-center)

Identity and Access Management (/iam)

MEDIA AND GAMING

Game Servers (/game-servers)

1. Please review the Cloud Monitoring (/monitoring/docs/region-support) documentation for regional scenarios.

We help keep your data safe and secure

GCP meets rigorous privacy and compliance standards that test for data safety, privacy, and security. We've earned the trust of many third-party auditors.

Learn more → (/security)



ISO/IEC 27001 (/security/compliance/iso-27001)



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ISO/IEC 27017 (/security/compliance/iso-27017)



ISO/IEC 27018 (/security/compliance/iso-27018)



SOC 1 (/security/compliance/soc-1)



FISC (Japan) (/security/compliance/fisc-japan)



FedRAMP (/security/compliance/fedramp)

* Exact list of certifications and standards may vary for specific data center, please contact sales to request additional information.

Resources



Regions and Zones



Best practices for Compute Engine region selection

 $\rightarrow \frac{\text{(/docs/geography-and-regions)}}$ Learn more

(/solutions/best-practices-Lear → compute-engine-regionn selection) more



The latest blog posts for infrastructure updates



Cloud Pathfinder by Cloudscene

→ (/blog/products/infrastru Read cture) blog

a (https://gpf.fin Find a Google d.cloud/) Cloud partner



Google Cloud infrastructure



Next '19: An Insider's Look— Google's Data Centers

Learn more → (/infrastructure)

Watch video (https://www.youtube.com/watch?v=yfF3pOzdmIE)



Get started

Learn and build

New to GCP? Get started with qualifying GCP products for free with a \$300 credit.

try free (https://console.cloud.google.com/freetrial)

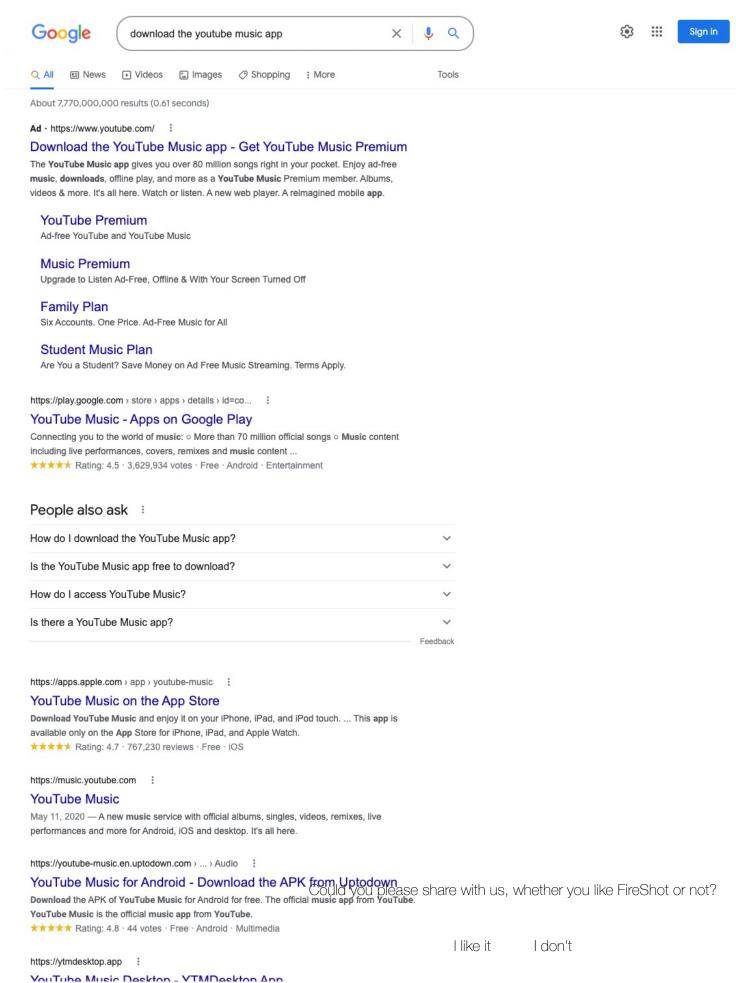
Need more help?

Our experts will help you build the right solution or find the right partner for your needs.

Contact sales (/contact)

Find a partner (https://cloud.withgoogle.com/partners/)

EXHIBIT CS



YouTube Music Desktop. YouTube Music Desktop. Free cross platform Desktop Player for YouTube Music. Download. Donate. Enjoy your music. On the desktop

https://youtube-music.en.softonic.com > ... > Video

YouTube Music - Download

Nov 10, 2021 — Top downloads Video for Android · TubeMate 2 · TubeMate · VidMate ·

Videoder Video Downloader App · MX Player.

**** Rating: 8/10 · 121 votes · Free · Android · Multimedia

https://www.iskysoft.com > online-video > youtube-mu... :

Top 20 YouTube Music Downloader App for Android, iPhone ...

Feb 18, 2022 — Part 1. Top 10 YouTube Music Downloader App for Android · #1. Droid YouTube Downloader · #2. Best Tube - Best/Popular videos · #3. TubeMote · #4.

https://worldscholarshipforum.com > wealth > best-app-...

10 Best App to Download Music from Youtube in 2022 - World ...

Mar 9, 2022 - You can download Mp3 or MP4 music directly from YouTube to your phone using a few apps. Here are the best app to download music from ...

Videos



Download music to listen offline with YouTube Music (Android)

YouTube · YouTube Viewers May 12, 2020

4 key moments in this video



How to Use YouTube Music - Beginners Guide

YouTube · Techboomers Jun 30, 2020

4 key moments in this video

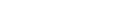


How to use YouTube Music

YouTube · 6 Months Later Reviews Jul 24, 2020



>



https://support.google.com > youtubemusic > answer \$\frac{1}{2}\$

Use YouTube Music with other apps and services - Google ...

Download the YouTube Music app · Open the Google Play Store on your watch. · Search for YouTube Music. · Select the YouTube Music app to start downloading it to ...

View all

Related searches :

Music apps









YouTube Music

Amazon Music

Apple Music

Shazam

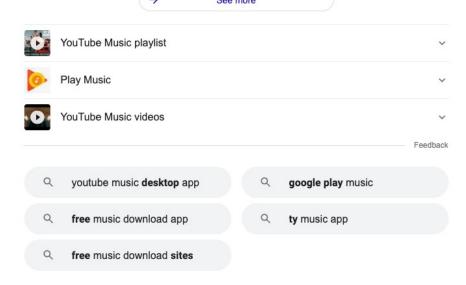
Spotify

Deezer

I like it

Feedback

I don't



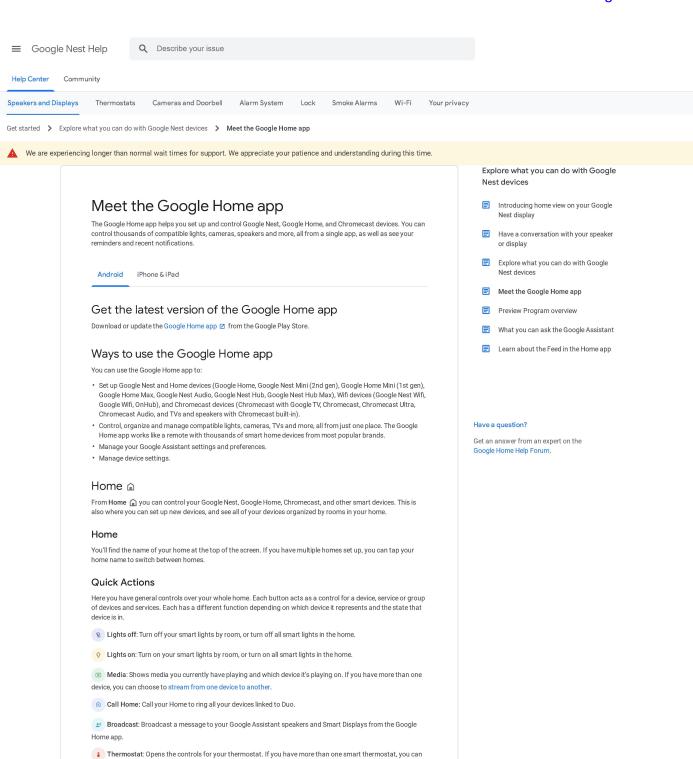


Little Italy, Chicago, IL - From your IP address - Update location
 Help Send feedback Privacy Terms

Could you please share with us, whether you like FireShot or not?

I like it I don't

EXHIBIT CT



Devices in your home

Settings: Opens your home settings.

Routines: Create and manage routines for your device.

choose which one to control.

Rooms

Your Google Nest, Google Home, Chromecast, and other smart home devices are listed by room. Tap on a device to open the controls for that device.

Cameras: Shows the video feed from your camera. If you have more than one camera, you can choose which

🗷 Action chips: Quickly connect smart home devices, link media services, and take other recommended

🤝 Wifi: Run speed tests and manage your Nest Wifi, Google Wifi, or OnHub network and settings.

Google Nest 🔼

In your home

Devices that are part of your home, but are not currently assigned to any room will be listed here. Tap on a device to open the controls for that device. You will also be able to assign them to a room.

Groups

Speaker groups on your local Wi-Fi network will appear here. Tap on a group to open the controls for the speaker group.

Other cast devices

Devices that are connected to your local Wi-Fi network, but aren't added to your home can be found here.

Device controls

From Home ____, tap on a device to control your device or access its settings. Different types of devices will have different controls.

- Google Nest and Home speakers and displays Control the speaker's volume and EQ, or access settings. You
 can also play, pause, skip forward or backward in a song, podcast or audiobook, or stop casting.
- Chromecast devices Control the display's volume, or access settings. You can also play, pause, skip forward
 or backward in a video, movie or TV show or stop casting.
- Lights Turn your smart lights on and off and adjust their brightness (if supported).
- Thermostat Adjust your thermostat's set point, change modes, and see the ambient temperature.
- . Smart Plugs Turn your smart plug on and off.
- . Cameras View the stream from cameras.
- Speaker Groups Control the volume and EQ of all devices in the speaker group, or access the group's settings.
 You can also play, pause, skip forward or backward in a song, podcast or audiobook, or stop casting.

Feed 🗉

The Feed 🖪 tab is where you can get alerts about important device activities and reminders.

- · Priority events See highlights from the last 30 days.
- 48-hour recap Get an overview of your device events for the past 48 hours.
- Discover Learn about new features, supported queries, Chromecast-enabled apps, and offers available for your devices.

Account menu

Select your photo on the upper right corner of your Google Home app to access the following settings:

2+ Add another account - Set up devices and services, add household members, and create speaker groups and homes

2. Manage accounts on this device - Add or remove accounts.

the Home app settings - Manage your General Privacy & Legal, and app settings.

- Email notifications Manage your email notifications.
- Clear saved Wi-Fi networks Clear all saved Wi-Fi networks.
- Clear app locations Remove your saved locations.
- Partner Connections Choose which data you share with Google Nest partners.
- Search and watch history Manage your search and watch history.
- Google Nest privacy FAQs Read privacy FAQs.
- Supplemental Nest Terms of Service.
- Open Source licenses.
- · App info View the app version.
- Google app settings View your Google app settings.
- * Rate the app Rate the app in the Google Play store.

* Assistant settings - Manage your Google Assistant settings, services, and linked devices.

My Activity - See and manage your Google Assistant activity.

Welp & Feedback - Access the Chromecast and Google Nest Help Centers. Get answers to questions and find troubleshooting information. Submit a feedback report for your Google Nest, Google Home, Chromecast, and Chromecast Built-In devices.

Home Settings ®

General

- Home information Manage your home nickname and address
- Household Manage home members.
- Rooms and devices View your existing rooms and devices.

Features

- Notifications Choose which app notifications you want to receive.
- Digital Wellbeing Manage your Digital Wellbeing settings.
- Routines Create and manage routines for your device.
- Nest Wifi Manage your Nest Wifi, Google Wifi, or OnHub network name, password, and settings.
- Nest Aware Manage subscription and features (migrated accounts only).

Services

- Video Set your preferred photo and video providers.
- Music Choose from popular music providers.
 Radio Choose your preferred radio service.
- Live TV Link Live TV services.
- Live TV Link Live TV services.
- Voice and video calls View and manage your calling preferences.

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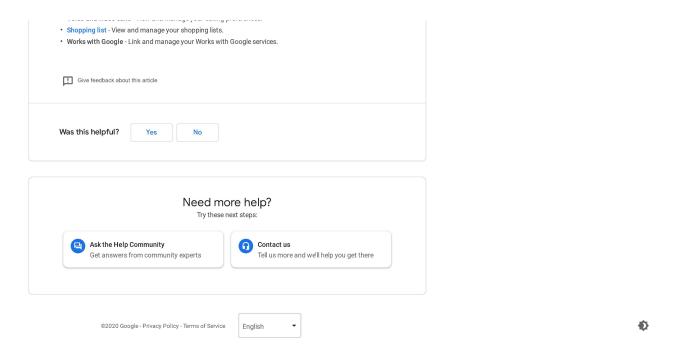


EXHIBIT CU

Devices & services country availability

Here's where you can find devices available for purchase on the Google Store today.

To buy a device from the Google Store, your shipping address must be in the same region as the Google Store you purchased it from. See the list of regions where Google Store operates 🗷 .

Note: If an item is out of stock, join the waitlist to be notified as soon as it's available for purchase. For the most current information, we recommend joining the waitlist instead of contacting Google Store support. Stock is limited, if a waitlist is not available, check back regularly for new units.

Phones



Pixel 6 Pro

Australia, Canada, France, Germany, Ireland, Italy, Japan, Singapore, Spain, Taiwan, United Kingdom, United States



Pixel 6

Australia, Canada, France, Germany, Ireland, Italy, Japan, Singapore, Spain, Taiwan, United Kingdom, United States



Pixel 5a (5G)

Japan, United States (except Puerto Rico)



Pixel 3

Certified refurbished might be available on the Google Store in the United States.

Home & Entertainment



Google Wifi

Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, United States (except Puerto Rico)



Google Nest Audio

Australia, Austria, Belgium, Canada, Denmark, France, Germany, Ireland, Italy, Japan, Netherlands, Norway, Singapore, South Korea, Spain, Sweden, Switzerland, Taiwan, United Kingdom, United States (except Puerto Rico)



Google Nest Hub Max

Australia, Canada, France, Japan, United Kingdom, United States (except Puerto Rico)



Google Nest Hub (2nd gen)

Australia, Austria, Belgium, Canada, Denmark, France, Germany, Ireland, Italy Japan, Netherlands, New Zealand, Norway, Singapore, South Korea, Spain, Sweden, Switzerland, Taiwan, United Kingdom, United States (except for Puerto Rico)



Google Home Max

Australia, Canada, France, Germany, United Kingdom, United States (except Puerto Rico)



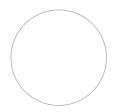
Google Nest Mini

Australia, Austria, Belgium, Canada, Denmark, France, Germany, Ireland, Italy, Japan, Netherlands, Norway, Singapore, South Korea, Spain, Sweden, Switzerland, Taiwan, United Kingdom, United States (except Puerto Rico)



Google Home

Australia, Austria, Canada, Denmark, France, Germany, Ireland, Italy, Japan, Netherlands, Norway, Singapore, South Korea, Spain, Sweden, United Kingdom, United States (except Puerto Rico)



Google Nest Wifi Router

Australia, Canada, France, Germany, Japan, Singapore, United Kingdom, United States (except Puerto Rico)



Google Nest Wifi Point

Australia, Canada, France, Germany, Japan, Singapore, United Kingdom, United States (except Puerto Rico)



Nest x Yale Lock with Google Nest connect

Canada, United States (except Puerto Rico)



Nest Doorbell (wired)

Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, Spain, Sweden, Switzerland, United Kingdom, United States (except Puerto Rico)



Nest Doorbell (battery)

Australia, Austria, Belgium, Canada, Denmark, Finland, Ireland, Italy, France, Germany, Japan, Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, United Kingdom, United States



Google Nest Thermostat

Canada, United States (except Puerto Rico)



Google Nest Learning Thermostat (3rd gen)

Belgium, Canada, France, Ireland, Italy, Netherlands, Spain, United Kingdom, United States (except Puerto Rico)



Google Nest Temperature Sensor

Canada, United States (except Puerto Rico)



Google Nest Thermostat E

Belgium, Canada, France, Ireland, Italy, Netherlands, Spain, United Kingdom, United States (except Puerto Rico)



Google Nest Protect (2nd gen)

Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, Spain, Sweden, Switzerland, United Kingdom, United States (except Puerto Rico)



Google Nest Connect

United States (except Puerto Rico)



Nest Cam (outdoor or indoor, battery)

Australia, Austria, Belgium, Canada, Denmark, Finland, India, Ireland, Italy, France, Germany, Japan, Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, United Kingdom, United States



Nest Cam (indoor, wired)

Australia, Austria, Belgium, Canada, Denmark, Finland, Ireland, Italy, France, Germany, Japan, Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, United Kingdom, United States (except Puerto Rico)



Nest Cam with Floodlight

Australia, Austria, Belgium, Canada, Denmark, Finland, France, Ireland, Germany, Netherlands, New Zealand, Norway, Sweden, United Kingdom, United States (except Puerto Rico)



Voice Remote for Chromecast with Google TV



Australia, Canada, France, Germany, Ireland, Italy, Japan, Spain, United Kingdom, United States (except Puerto Rico)



Chromecast with Google TV

Australia, Canada, France, Germany, Ireland, Italy, Japan, Spain, United Kingdom, United States (except Puerto Rico)



Ethernet Adapter for Chromecast (4K Google TV)

Australia, Canada, France, Germany, Ireland, Italy, Japan, Spain, United Kingdom, United States (except Puerto Rico)



Chromecast (3rd generation)

Australia, Canada, Denmark, Finland, Japan, Netherlands, New Zealand, Norway, Singapore, South Korea, Sweden, France, Germany, Italy, Spain, United Kingdom, United States (except Puerto Rico)



Chromecast (2nd generation)

Austria, Belgium, Ireland, Hong Kong, South Korea, Portugal, Switzerland, Taiwan



Chromecast Ultra

Denmark, Finland, Netherlands, New Zealand, Norway, Sweden



Chromecast Audio

Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Hong Kong, Ireland, Italy, Japan, South Korea, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Taiwan, United Kingdom, United States (except Puerto Rico)

Gaming



Stadia

Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, Norway, Spain, Sweden, Switzerland, United Kingdom, United States (except Hawaii and Puerto Rico)

Laptops & Tablets



Google Pixelbook Go

Canada, United Kingdom, United States (except Puerto Rico)



Google Pixelbook

Canada (except Quebec), United Kingdom, United States (except Puerto Rico)

Fitbit



Fitbit Charge 5

Australia, Canada, France, Germany, Ireland, Italy, Japan, Singapore, Spain, Taiwan, United Kingdom, United States



Fitbit Inspire 2

Australia, Canada, France, Germany, Ireland, Italy, Japan, Singapore, Spain, Taiwan, United Kingdom, United States



Fitbit Luxe

Australia, Canada, France, Germany, Ireland, Italy, Japan, Singapore, Spain, Taiwan, United Kingdom, United States



Fitbit Sense

Australia, Canada, France, Germany, Ireland, Italy, Japan, Singapore, Spain, Taiwan, United Kingdom, United States



Fitbit Versa 3

Australia, Canada, France, Germany, Ireland, Italy, Japan, Singapore, Spain, Taiwan, United Kingdom, United States

Programs & Subscriptions



Nest Aware

Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, United Kingdom, United States (except Puerto Rico)



Pixel Pass

United States (except Puerto Rico)



Preferred Care

Canada, United States

Accessories



Google Pixel Stand (2nd gen)

Australia, Canada, France, Germany, Ireland, Italy, Japan, Singapore, Spain, Taiwan, United Kingdom, United States



Google Pixel Buds (2nd generation)

Australia, France, Germany, Ireland, Italy, Japan, Singapore, Spain, United Kingdom



Pixel Buds A-Series

Australia, Canada, France, Germany, Ireland, Italy, Japan, Singapore, Spain, Taiwan, United Kingdom, United States



Titan Security Key USB-C/NFC

Austria, Belgium, Canada, France, Germany, Italy, Japan, Spain, Switzerland, United Kingdom, United States (except Puerto Rico)



Titan Security Key USB-A/NFC

Austria, Belgium, Canada, France, Germany, Italy, Japan, Spain, Switzerland, United Kingdom, United States (except Puerto Rico)

Delivery restrictions

You can't buy devices on the Google Store in the following regions:

Note: This list is a sample of places we know we can't deliver. It may not include all undeliverable territories.

- Andorra
- Canada: Nunavut, Northwestern Territories, Yukon
- · Finland: Aland Islands
- France: Guadeloupe, Martinique, Réunion, St. Pierre and Miquelon, and French Guiana
- Germany: Busingen and the Isle of Heligoland
- Hong Kong: Sha Tau Kok, Ta Kwu Ling, Man Kam To, Mai Po, Lok Ma Chau, Closed area, Lo Wu, Po Toi, Tung Lung Chau, Grass Island, Crooked Island (Kat O), Tung Ping Chau, Mui Wo, Lamma Island, Peng Chau, Cheung Chau, Tai O, Lantau Island
- Italy: Vatican City, Livigno, San Marino, Campione d'Italia
- Monacc
- · Portugal: Madeira, Azores
- · Spain: Ceuta, Melilla, and the Canary Islands
- United Kingdom: Isle of Man, Channel Islands, Gibraltar
- · United States: Virgin Islands, Guam

Need more help?

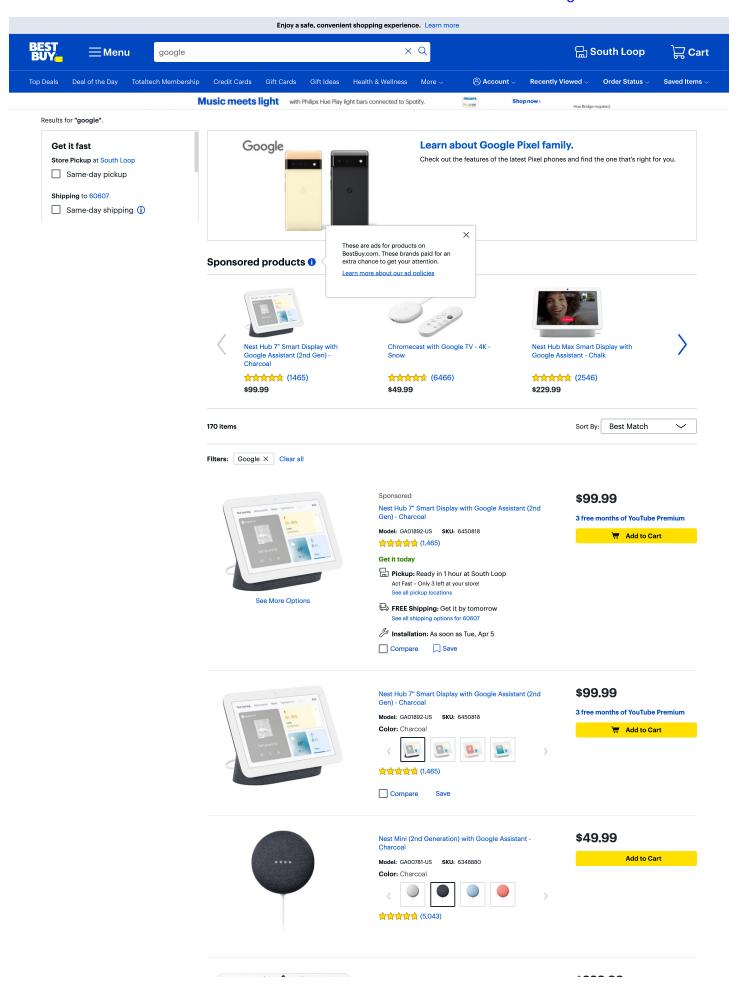
Try these next steps:



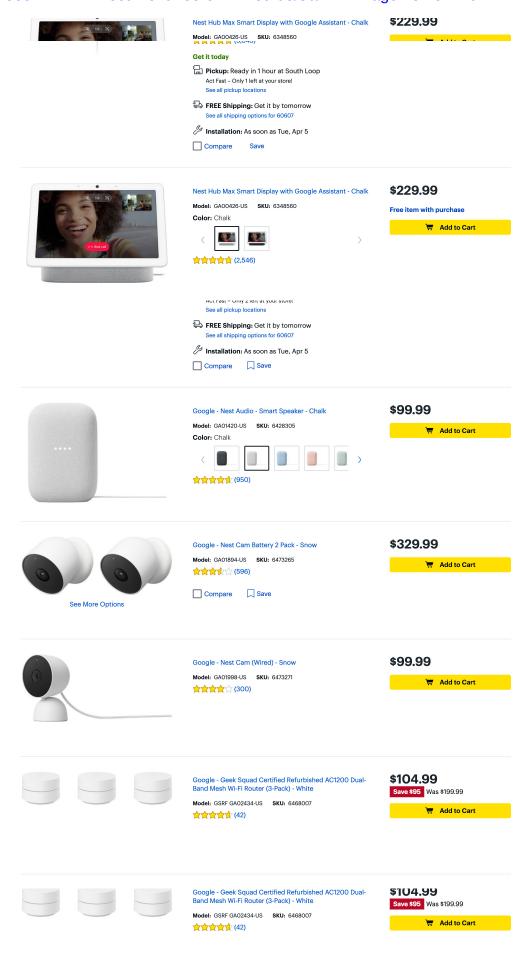
Contact us

Tell us more and we'll help you get there

EXHIBIT CV



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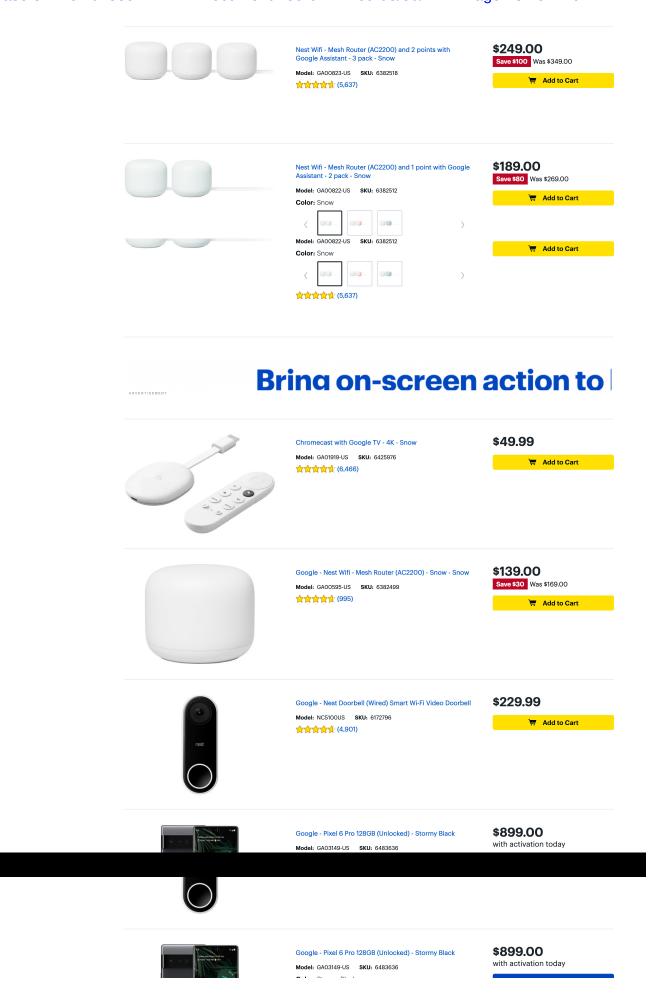


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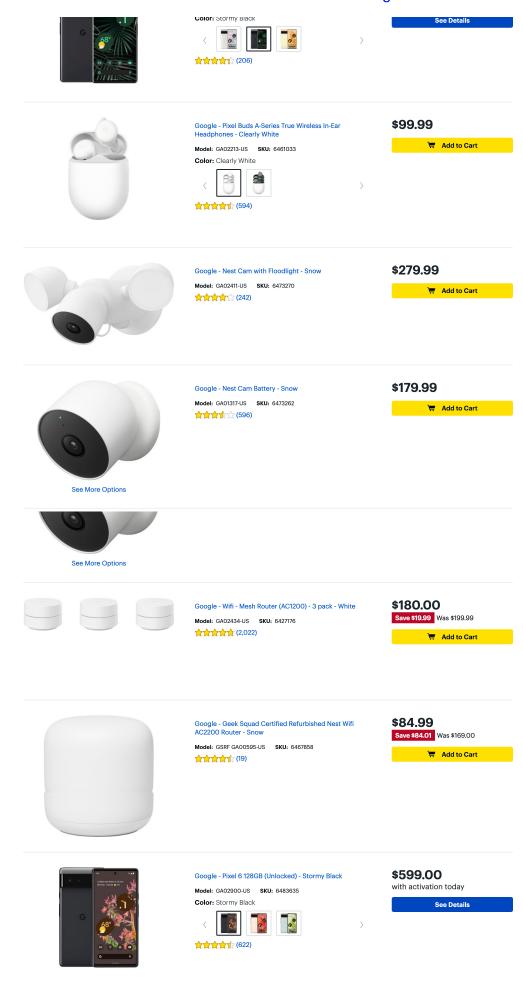
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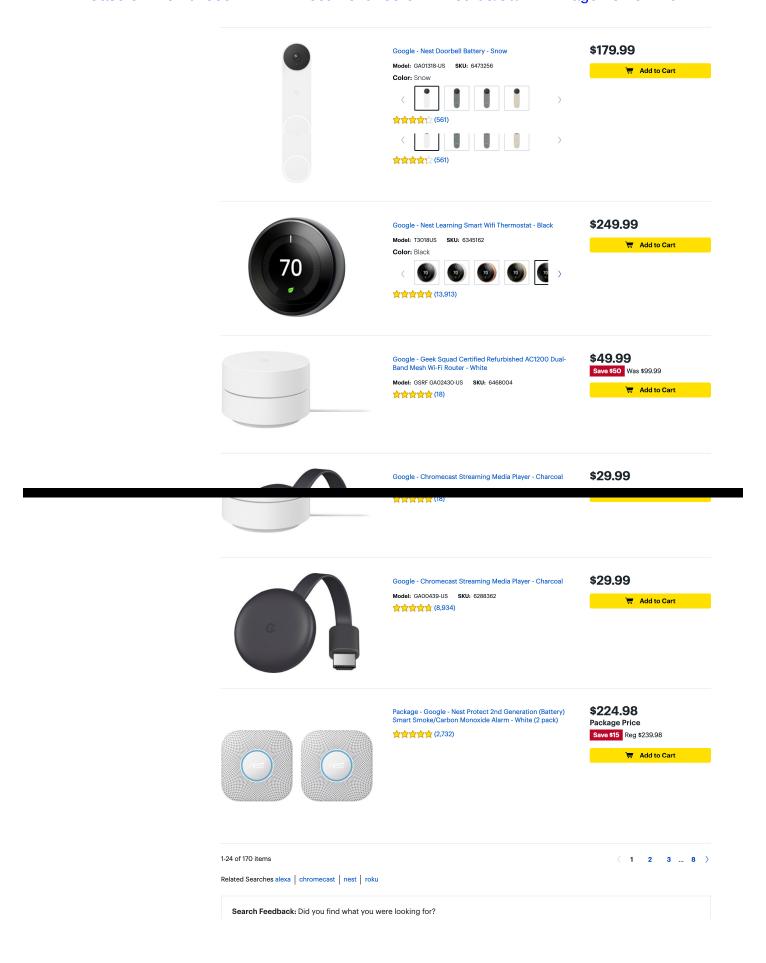


EXHIBIT CW

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	UNITED STATES DIS	
.0	FOR THE NORTHERN DISTRICT OF CALIFORNIA	
1	GOOGLE LLC,	Case No. 3:20-cy-6754
2	GOOGLE LEC,	Case 110. 3.20-ev-0/34
	Plaintiff,	SONOS, INC.'S THIRD
3		SUPPLEMENTAL RESPONSES AND
4	V.	OBJECTIONS TO GOOGLE'S FIRST SET OF INTERROGATORIES [1-20]
5	SONOS, INC.,	SET OF INTERROGATORIES [1-20]
3	Defendant.	Judge: Hon. William Alsup
6	Dejenuuni.	Complaint Filed: September 28, 2020
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ATTORNEYS' EYES ONLY

SONOS'S 3RD SUPP. RESP. AND OBJS. TO GOOGLE'S FIRST ROGS [1-20] CASE NO. 3:20-CV-06754-WHA 00043808-812.

Sonos reserves the right to revise, correct, add to, supplement, or clarify its response to this Interrogatory as additional information is discovered and/or becomes available.

INTERROGATORY NO. 15

Separately for each asserted claim of the Asserted Patents, set forth the complete basis for any contention that Google indirectly infringes such claim, including by identifying all documents supporting that contention.

RESPONSE TO INTERROGATORY NO. 15

Sonos objects to this interrogatory as overbroad, unduly burdensome, and not reasonably proportional to the needs of the case insofar as it purports to require Sonos to "set forth the *complete* basis for *any* contention that Google indirectly infringes . . . including by identifying *all* documents supporting that contention."

Sonos further objects to this Interrogatory as premature to the extent it seeks expert discovery in advance of the date set forth in the Federal Rules of Civil Procedure and/or the Court's Scheduling Order.

Sonos further objects to this Interrogatory on the ground that it is a premature contention interrogatory that has been filed before a substantial amount of discovery has been conducted in this lawsuit. *See* Fed. R. Civ. P. 33(a)(2) ("[T]he court may order that [a contention] interrogatory need not be answered until after designated discovery is complete").

Sonos further objects to this Interrogatory as premature to the extent that some of the information called for by this interrogatory is in the possession of Google or third parties and has not yet been produced in this case.

Subject to, and without waiving, the foregoing Specific and General Objections, Sonos states that much of the information necessary to respond to this Interrogatory is uniquely within the possession of Google or third parties, and Sonos will seasonably supplement its response to this Interrogatory upon obtaining such information, including at least information produced in

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response to subpoenas served on Spotify, as well as Google documents produced in response to Request For Production Nos. 6, 24, 25, 26, and Google's responses to Interrogatory No. 17, which are incorporated by reference herein.

Sonos also incorporates by reference herein its preliminary infringement contentions and, when served, its final infringement contentions.

Sonos reserves the right to revise, correct, add to, supplement, or clarify its response to this Interrogatory as additional information is discovered and/or becomes available.

FIRST SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 15 (3/21/2022)

Sonos incorporates by reference its response and objections above. Sonos further responds as follows:

A. '615 and '033 Patents

With actual knowledge of the '615 and '033 Patents and Sonos's contention of how the Accused Products meet the asserted claims of the '615 and '033 Patents, Google – through its website, advertising and promotional material, user guides, and/or the Google Play Store – has and continues to actively, knowingly, and intentionally encourage others to make, use, offer to sell, or sell Accused Products in the United States and/or import Accused Products into the United States, which Google knows results in direct infringement.

For example, Google actively, knowingly, and intentionally instructs and encourages customers to download, install and/or update Google's Cast-enabled apps that allow a customer to transfer playback of streaming media content from the customer's smartphone, tablet, or computer devices to a Cast-enabled media player and then control the Cast-enabled media player's playback, including but not limited to the YouTube app, YouTube Kids app, YouTube TV app, YouTube Music app, and Google Play Music app, accessed via either an app store or Chromecast-enabled site URL (including youtube.com, music.youtube.com, tv.youtube.com, and spotify.com). Google knows that when its customers download, install and/or update these Cast-enabled apps, this thereby "make[s]" an infringing device, which constitutes direct infringement of claims 13-15, 18-21, 23-26, 28-29 of the '615 Patent and claims 1-2, 4, 7-13 of the '033 Patent under

35 U.S.C. § 271(a). Example evidence of these activities by Google can be seen in, e.g., GOOG
SONOSWDTX-00006564 - GOOG-SONOSWDTX-00006566 at 564 (encouraging customers to
"[d]ownload the YouTube app" and "[i]nstall" the "YouTube Music" app); SONOS-SVG2-
00060188 - SONOS-SVG2-00060191 at 188 (encouraging customers to download the YouTube
app); SONOS-SVG2-00060176 - SONOS-SVG2-00060179 at 176 (encouraging customers to
download the YouTube Kids app); SONOS-SVG2-00060184 - SONOS-SVG2-00060187 at 184
(encouraging customers to download the YouTube TV app); GOOG-SONOSWDTX-00023379
GOOG-SONOSWDTX-00023380 at 379 (encouraging customers to download the Google Play
app); SONOS-SVG2-00060180 - SONOS-SVG2-00060183 at 180 (encouraging customers to
download the YouTube Music app); SONOS-SVG2-00060385 (encouraging customers to
"download the YouTube app" on "phones or tablets running Android version 4.0 and above.");
SONOS-SVG2-00060444 (encouraging customers to "update to the most up-to-date version" of
the YouTube app); GOOG-SONOSWDTX-00031612 - GOOG-SONOSWDTX-00031613 at
612 (encouraging customers to "download the YouTube TV app"); GOOG-SONOSWDTX-
00031651 - GOOG-SONOSWDTX-00031654 at 653 (encouraging customers to download the
YouTube TV app); GOOG-SONOSWDTX-00022229 - GOOG-SONOSWDTX-00022231 at
230 (encouraging customers to download "Chromecast-enabled apps"); GOOG-SONOSWDTX-
00007285 - GOOG-SONOSWDTX-00007286 at 285 (encouraging customers to download
various "Chromecast-enabled apps," including "Google Play Music, Spotify, Pandora,
iHeartRadio, TuneIn Radio, Deezer, Rhapsody, Napster, NPROne, BeyondPod, and more," to
"cast to your audio device from your mobile device or tablet"); GOOG-SONOSWDTX-
00036843 - GOOG-SONOSWDTX-00036844 (encouraging customers to download Cast-
enabled apps, including Google Play Music and YouTube Music); GOOG-SONOSWDTX-
00006553 - GOOG-SONOSWDTX-00006554 at 554 (Google software engineer encouraging
customers to "download the YouTube Music app in the Play Store or App Store."); GOOG-
SONOSWDTX-00019270 - GOOG-SONOSWDTX-00019271 at 270 (encouraging customers to
"download the YouTube Music app."); GOOG-SONOSWDTX-00020857 - GOOG-

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SONOSWDTX-00020858 at 857 (instructing customers how to download the Google Play Music app).

As another example, Google actively, knowingly, and intentionally instructs and encourages customers to download, install and/or update Cast-enabled software (e.g., firmware updates and/or Cast-enabled apps) onto the Cast-enabled displays. Google knows that when its customers download, install and/or update Cast-enabled software (e.g., firmware updates and/or Cast-enabled apps) onto the Cast-enabled displays, this thereby "make[s]" an infringing device, which constitutes direct infringement of claims 13-15, 18-21, 23-26, 28-29 of the '615 Patent and claims 1-2, 4, 7-13 of the '033 Patent under 35 U.S.C. § 271(a). Example evidence of these activities by Google can be seen in, e.g., SONOS-SVG2-00062706 ("When a firmware update is available, your device will automatically download the update via an Over-the-Air (OTA) update."); SONOS-SVG2-00062709 - SONOS-SVG2-00062710 at 709 ("If your Nest products have a reliable internet connection, they should update their software automatically."); SONOS-SVG2-00062711 ("To enjoy the latest and greatest features available on Google Nest or Home speaker or display, your device may need to be updated to the most recent software version. This is done automatically as part of setup so there's nothing you need to do to get the update."); SONOS-SVG2-00062707 - SONOS-SVG2-00062708 at 707 ("Google Nest connected home devices will receive automatic security updates for at least five years from the date we start selling them on the US Google Store.").

As another example, Google actively, knowingly, and intentionally encourages customers to use Cast-enabled computing devices installed with one or more of the accused Cast-enabled apps (including Google's own Cast-enabled apps and third-party Cast-enabled apps, such as Spotify) and use Cast-enabled displays. Google knows that when its customers use Cast-enabled computing devices installed with one or more of the accused Cast-enabled apps (including Google's own Cast-enabled apps and third-party Cast-enabled apps, such as Spotify) and use Cast-enabled displays, this constitutes direct infringement of the asserted claims of the '615 Patent and '033 Patent under 35 U.S.C. § 271(a). Example evidence of these activities by Google can be seen in the foregoing and in the following evidence in which Google instructs and encourages customers to subscribe to

one or more aforementioned Cast-enabled apps that allow a user to transfer playback of streaming media content from the user's smartphone, tablet, or computer devices to a Castenabled media player and then control the Cast-enabled media player's playback. See, e.g., GOOG-SONOSWDTX-00027825 - GOOG-SONOSWDTX-00027827 at 825 (encouraging customers to subscribe to YouTube TV, YouTube Premium, and YouTube Music Premium); SONOS-SVG2-00060452 - SONOS-SVG2-00060457 (encouraging customers to subscribe to YouTube TV by offering a free trial); GOOG-SONOSWDTX-00043828 - GOOG-SONOSWDTX-00043830 (encouraging customers to subscribe to YouTube Premium by offering a free trial); SONOS-SVG2-00060449 - SONOS-SVG2-00060451 (encouraging customers to subscribe to YouTube Premium); SONOS-SVG2-00060415 - SONOS-SVG2-00060417 at 415 (encouraging customers to "[g]et [YouTube] Music Premium to listen ad-free" and offering a free trial); SONOS-SVG2-00060389 - SONOS-SVG2-00060390 (explaining to customers the benefits of subscribing to YouTube Music Premium, including the ability to "[c]ast music to a speaker or TV device"); GOOG-SONOSWDTX-00007005 - GOOG-SONOSWDTX-00007007 at 005 (encouraging customers to get a YouTube Premium and YouTube Music Premium membership); SONOS-SVG2-00060391 - SONOS-SVG2-00060392 at 391 (encouraging customers to "[g]et a YouTube student membership" for YouTube Premium and YouTube Music Premium); SONOS-SVG2-00060445 - SONOS-SVG2-00060447 (encouraging customers to subscribe to YouTube Premium); SONOS-SVG2-00060441 -SONOS-SVG2-00060443 at 441 (encouraging customers to "[s]ign up for YouTube TV"); SONOS-SVG2-00060448 (encouraging customers to sign up for YouTube TV); SONOS-SVG2-00060386 - SONOS-SVG2-00060388 at 386 (encouraging customers to "sign up for YouTube TV" by offering a free trial); GOOG-SONOSWDTX-00031651 - GOOG-SONOSWDTX-00031654 at 651 (encouraging customers to "[s]ign up for YouTube TV"); SONOS-SVG2-00060341 - SONOS-SVG2-00060342 at 341 (encouraging customers to "[s]ign up for YouTube TV"). Further example evidence of these activities can be seen throughout Google's website that includes a webpage entitled "Play media from Chromecast-enabled apps to your Google Nest or Google Home speaker or display," which instructs and encourages Google's customers

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to "[c]ast from Chromecast-enabled apps to speaker or display" and "[c]ontrol everything from playback to volume." GOOG-SONOSWDTX-00005631 - GOOG-SONOSWDTX-00005636 at 631; see also, e.g., GOOG-SONOSWDTX-00022718 - GOOG-SONOSWDTX-00022719 at 718 (instructing and encouraging Google's customers to "[c]ast audio from Chromecast-enabled apps to speakers); GOOG-SONOSWDTX-00005979 (instructing and encouraging Google's customers to "[c]ast from the YouTube app and YouTube.com"); SONOS-SVG2-00060341 - SONOS-SVG2-00060342 at 341 (instructing and encouraging Google's customers to "[c]ast YouTube TV using Chromecast"); SONOS-SVG2-00060340 (instructing and encouraging Google's customers to "[w]atch YouTube Kids videos" with "Chromecast"); SONOS-SVG2-00060001 - SONOS-SVG2-00060002 at 001 (instructing and encouraging Google's customers to "[l]isten to music with Google Play Music and Chromecast"); GOOG-SONOSWDTX-00005760 - GOOG-SONOSWDTX-00005761 at 760 ("Learn how to cast to your speakers").

As a further example, Google actively, knowingly, and intentionally encourages customers to use Cast-enabled computing devices installed with one or more of the accused Cast-enabled apps (including Google's own Cast-enabled apps and third-party Cast-enabled apps, such as Spotify) and use Cast-enabled displays when it advertises for purchase Google's "Pixel" smartphones, tablets, and computer devices (e.g., the Pixel, Pixel XL, Pixel 2, Pixel 2 XL, Pixel 3, Pixel 3 XL, Pixel 3a, Pixel 3a XL, Pixel 4, Pixel 4 XL, Pixel 4a, Pixel 4a (5G), Pixel 5, Pixel 5a (5G), Pixel 6, and Pixel 6 Pro phones, the Pixel Slate tablet, and the Pixelbook and Pixelbook Go laptops) that are preinstalled (or can be installed) with one or more aforementioned Cast-enabled apps that allow a user to transfer playback of streaming media content from a purchased smartphone, tablet, or computer device to a Cast-enabled media player. Example evidence of these activities by Google can be seen in, e.g., SONOS-SVG2-00060374 - SONOS-SVG2-00060379 (encouraging customers to buy Pixel phones); SONOS-SVG2-00060192 - SONOS-SVG2-00060198 (encouraging customers to buy the Pixel 6 Pro and Pixel 6 phones); SONOS-SVG2-00060430 -SONOS-SVG2-00060440 (encouraging customers to buy the Pixel 6 phone); GOOG-SONOSWDTX-00006481 - GOOG-SONOSWDTX-00006495 (encouraging customers to buy the Pixel 5 phone); GOOG-SONOSWDTX-00006045 - GOOG-SONOSWDTX-00006047

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(encouraging customers to buy the Pixel 4a phone); GOOG-SONOSWDTX-00006452 - GOOG-SONOSWDTX-00006471 (encouraging customers to buy the Pixel 4 phone); GOOG-SONOSWDTX-00006372 - GOOG-SONOSWDTX-00006392 (encouraging customers to buy the Pixel 3a phone); GOOG-SONOSWDTX-00007857 - GOOG-SONOSWDTX-00007861 (Former Google GM & VP encouraging customers to pre-order the Pixel 3 and Pixel 3XL phones); GOOG-SONOSWDTX-00007954 - GOOG-SONOSWDTX-00007956 (Google VP of Product Management encouraging customers to pre-order the Pixel 4 and Pixel 4XL phones); GOOG-SONOSWDTX-00006363 - GOOG-SONOSWDTX-00006371 (encouraging customers to buy the Pixelbook Go); GOOG-SONOSWDTX-00006187 - GOOG-SONOSWDTX-00006193 (encouraging customers to buy the Pixelbook Slate); SONOS-SVG2-00060409 -SONOS-SVG2-00060414 (encouraging customers to buy the Pixelbook); GOOG-SONOSWDTX-00008145 - GOOG-SONOSWDTX-00008148 (Google Director of Product Management encouraging customers to buy the Pixelbook); SONOS-SVG2-00060380 -SONOS-SVG2-00060383 (enticing customers with "special offers" to encourage them to buy Pixel phones). As a further example, Google actively, knowingly, and intentionally encourages distributors and retailers to offer to sell and sell Cast-enabled computing devices installed with one or

distributors and retailers to offer to sell and sell Cast-enabled computing devices installed with one or more of the accused Cast-enabled apps, as well as Cast-enabled displays. Google knows that distributors and retailers offer to sell and sell Cast-enabled computing devices installed with one or more of the accused Cast-enabled apps, as well as Cast-enabled displays, which constitutes direct infringement of the asserted claims of the '615 Patent and '033 Patent under 35 U.S.C. § 271(a). Example evidence of these activities by Google can be seen in, *e.g.*, SONOS-SVG2-00062689 - SONOS-SVG2-00062703 at 693(Google SVP and CBO publicly reporting that Google has "signed partnership agreements with over 45 carriers and retailers across nine countries at launch – including deep collaboration with each of the major US carriers: AT&T, T-Mobile, and Verizon."); SONOS-SVG2-00062703 - SONOS-SVG2-00062705 at 703 (providing a list of 13 "carriers with 5G" that work with a Pixel phone); SONOS-SVG2-00062715 - SONOS-SVG2-00062712 -

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SONOS-SVG2-00062714 at 712 ("You can purchase Google Nest or Home devices from the Google Store or an authorized reseller, depending on the device and country.").

B. '966 Patent

With actual knowledge of the '966 Patent and Sonos's contention how the Accused Products meet the asserted claims of the '966 Patent, Google – through its website, advertising and promotional material, user guides, and/or the Google Play Store, and via audible or visual instructions emitted from or displayed on the Cast-enabled media players, Cast-enabled computing devices, and/or Cast-enabled displays – has and continues to actively, knowingly, and intentionally encourage others to make, use, offer to sell, or sell computing devices installed with at least the Google Home app in the United States and/or import such devices into the United States, which Google knows results in direct infringement.

For example, Google's website includes a webpage entitled "Create and manage speaker groups," which instructs and encourages Google's customers to "[g]roup any combination of Google Nest or Google Home speakers and displays and Chromecast devices together for synchronous music throughout the home." GOOG-SONOSWDTX-00007122 - GOOG-SONOSWDTX-00007128 at 122.

For example, Google actively, knowingly, and intentionally instructs and encourages customers to download, install and/or update the Google Home app onto smartphones, tablets, and computer devices. Google knows that when its customers download, install and/or update the Google Home app onto smartphones, tablets, and computer devices, this thereby "make[s]" an infringing device, which constitutes direct infringement of claims 1-4, 6-12, 14-16 of the '966 Patent under 35 U.S.C. § 271(a). Example evidence of these activities by Google can be seen in, *e.g.*, *See*, *e.g.*, GOOG-SONOSWDTX-00022675 - GOOG-SONOSWDTX-00022676 at 675 (encouraging customers to download the Google Home app); GOOG-SONOSWDTX-00007538 - GOOG-SONOSWDTX-00007540 at 538 ("Download or update the Google Home app"); GOOG-SONOSWDTX-00005650 at 649 ("Download the Google Home app"); GOOG-SONOSWDTX-00005761 at 760 ("download the Google Home app"); GOOG-SONOSWDTX-00005761 at 760 ("download the Google Home app"); GOOG-SONOSWDTX-00005984 - GOOG-

	SONOSWDTX-00005985 ("You can download the Google Home app from the Google Play
	Store or the App store."); GOOG-SONOSWDTX-00007318 ("On your phone or tablet,
	download the latest version of the Google Home app available on Android or iOS."); GOOG-
	SONOSWDTX-00007329 ("You can download the Google Home app from the Google Play
	Store or the App store."); GOOG-SONOSWDTX-00007490 - GOOG-SONOSWDTX-00007491
	("Your child needs to download the Google Home app from the Google Play Store on their
	phone."); GOOG-SONOSWDTX-00007639 - GOOG-SONOSWDTX-00007640 at 639 (Google
	Product Manager encouraging customers to "download the Google Home app"); GOOG-
	SONOSWDTX-00008437 - GOOG-SONOSWDTX-00008440 at 438 ("Download the latest
	version of the Google Home app available on Android or iOS."); GOOG-SONOSWDTX-
	00015803 - GOOG-SONOSWDTX-00015804 at 803 (Download the Google Home app on
	Android or iOS."); GOOG-SONOSWDTX-00016964 - GOOG-SONOSWDTX-00016966 at 965
	("download the Google Home app"); GOOG-SONOSWDTX-00021429 - GOOG-
	SONOSWDTX-00021431 at 430 ("download the Google Home app"); GOOG-SONOSWDTX-
	00022294 ("On your mobile device or tablet, download the Google Home app."); GOOG-
	SONOSWDTX-00022919 ("If you don't already have the Google Home app downloaded on
	your Android device, the Play Store app will open and you can download the Google Home
	app."); GOOG-SONOSWDTX-00026760 ("download the Google Home app"); GOOG-
	SONOSWDTX-00027617 ("Click below to download the Google Home app on your mobile
	phone or tablet."); GOOG-SONOSWDTX-00027684 - GOOG-SONOSWDTX-00027685 at 684
	("Download the Google Home app."); GOOG-SONOSWDTX-00029578 - GOOG-
	SONOSWDTX-00029579 at 578 ("Download the Google Home app."); SONOS-SVG2-
	00060393 - SONOS-SVG2-00060394 at 393 ("Download the Google Home app."); GOOG-
	SONOSWDTX-00022894 ("Install the Google Home app by downloading the Google Home app
	on your Chromecast-supported Android device."); GOOG-SONOSWDTX-00023223
	(encouraging customers to "upgrade to the latest version of the Google Home app."); SONOS-
	SVG2-00060384 ("Click one of the buttons below to download the Google Home app on your
	mobile phone or tablet"); GOOG-SONOSWDTX-00005770 - GOOG-SONOSWDTX-00005772
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("Install the Google Home app by downloading the Google Home app on your Chromecastsupported Android device.").

As another example, Google actively, knowingly, and intentionally encourages customers to use Cast-enabled computing devices installed with one or more of the accused Cast-enabled apps (including Google's own Cast-enabled apps and third-party Cast-enabled apps, such as Spotify) and use Cast-enabled displays when it advertises for purchase Google's "Pixel" smartphones, tablets, and computer devices (e.g., the Pixel, Pixel XL, Pixel 2, Pixel 2 XL, Pixel 3, Pixel 3 XL, Pixel 3a, Pixel 3a XL, Pixel 4, Pixel 4 XL, Pixel 4a, Pixel 4a (5G), Pixel 5, Pixel 5a (5G), Pixel 6, and Pixel 6 Pro phones, the Pixel Slate tablet, and the Pixelbook and Pixelbook Go laptops) that are preinstalled (or can be installed) with one or more aforementioned Cast-enabled apps that allow a user to transfer playback of streaming media content from a purchased smartphone, tablet, or computer device to a Cast-enabled media player. Example evidence of these activities by Google can be seen in, e.g., As yet another example, Google instructs and encourages Google's customers to directly infringe one or more asserted claims of the '966 Patent by purchasing Google's own "Pixel" smartphones, tablets, and computer devices (e.g., the Pixel, Pixel XL, Pixel 2, Pixel 2 XL, Pixel 3, Pixel 3 XL, Pixel 3a, Pixel 3a XL, Pixel 4, Pixel 4 XL, Pixel 4a, Pixel 4a (5G), Pixel 5, Pixel 5a (5G), Pixel 6, and Pixel 6 Pro phones, the Pixel Slate tablet, and the Pixelbook and Pixelbook Go laptops) that are preinstalled (or can be installed) with the Google Home app. See, e.g., SONOS-SVG2-00060374 - SONOS-SVG2-00060379 (encouraging customers to buy Pixel phones); SONOS-SVG2-00060192 - SONOS-SVG2-00060198 (encouraging customers to buy the Pixel 6 Pro and Pixel 6 phones); SONOS-SVG2-00060430 - SONOS-SVG2-00060440 (encouraging customers to buy the Pixel 6 phone); GOOG-SONOSWDTX-00006481 - GOOG-SONOSWDTX-00006495 (encouraging customers to buy the Pixel 5 phone); GOOG-SONOSWDTX-00006045 - GOOG-SONOSWDTX-00006047 (encouraging customers to buy the Pixel 4a phone); GOOG-SONOSWDTX-00006452 - GOOG-SONOSWDTX-00006471 (encouraging customers to buy the Pixel 4 phone); GOOG-SONOSWDTX-00006372 - GOOG-SONOSWDTX-00006392 (encouraging customers to buy the Pixel 3a phone); GOOG-SONOSWDTX-00007857 - GOOG-SONOSWDTX-00007861

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(Former Google GM & VP encouraging customers to pre-order the Pixel 3 and Pixel 3XL phones); GOOG-SONOSWDTX-00007954 - GOOG-SONOSWDTX-00007956 (Google VP of Product Management encouraging customers to pre-order the Pixel 4 and Pixel 4XL phones); GOOG-SONOSWDTX-00006363 - GOOG-SONOSWDTX-00006371 (encouraging customers to buy the Pixelbook Go); GOOG-SONOSWDTX-00006187 - GOOG-SONOSWDTX-00006193 (encouraging customers to buy the Pixelbook Slate); SONOS-SVG2-00060409 - SONOS-SVG2-00060414 (encouraging customers to buy the Pixelbook); GOOG-SONOSWDTX-00008145 - GOOG-SONOSWDTX-00008148 (Google Director of Product Management encouraging customers to buy the Pixelbook); SONOS-SVG2-00060380 - SONOS-SVG2-00060383 (enticing customers with "special offers" to encourage them to buy Pixel phones).

Google also knows (or should know) that its actions will induce users of the Accused Products to directly infringe one or more asserted claims of the '966 Patent, and that users of the Accused Products directly infringe one or more asserted claims of the '966 Patent. For instance, Google supplies software components included in the Google Home app for installation onto computing devices outside the United States. Google intends that others outside the United States, including users, install these software components onto computing devices and knows that such installation does in fact occur and that such installation, if occurring in the United States, would directly infringe one or more asserted claims of the '966 Patent.

C. '885 Patent

Despite knowing of the '885 Patent, Google actively, knowingly, and intentionally induced the infringement of the '885 Patent by actively encouraging others to make, use, offer to sell, or sell the Cast-enabled media players in the United States and/or import the Cast-enabled media players into the United States in violation of 35 U.S.C. § 271(b). In particular, with actual knowledge of '885 Patent, Google intentionally causes, urges, or encourages users of the Cast-enabled media players to directly infringe one or more asserted claims of the '885 Patent by promoting, advertising, and instructing customers and potential customers about the Cast-enabled media players and uses thereof, including infringing uses. For example, Google's

website includes a webpage entitled "Create and manage speaker groups," which instructs and encourages Google's customers to "[g]roup any combination of Google Nest or Google Home speakers and displays and Chromecast devices together for synchronous music throughout the home." GOOG-SONOSWDTX-00007122 - GOOG-SONOSWDTX-00007128 at 122.

As yet another example, Google instructs and encourages Google's customers to directly infringe one or more asserted claims of the '855 Patent by purchasing Cast-enabled media players. See, e.g., GOOG-SONOSWDTX-00007541 - GOOG-SONOSWDTX-00007552 (encouraging customers to buy the Nest Audio); GOOG-SONOSWDTX-00005212 - GOOG-SONOSWDTX-00005214 at 212 (Google Product Manager encouraging customers to pre-order the Nest Mini); SONOS-SVG2-00060395 - SONOS-SVG2-00060398 (encouraging users to buy the Google Home Mini); SONOS-SVG2-00060426 - SONOS-SVG2-00060429 (encouraging customers to buy "smart speakers" including the Nest Mini and Nest Audio); SONOS-SVG2-00060418 - SONOS-SVG2-00060425 (encouraging customers to buy the Nest Hub (2nd gen)); SONOS-SVG2-00060399 - SONOS-SVG2-00060408 (encouraging customers to buy the Nest Hub Max); GOOG-SONOSWDTX-00005645 - GOOG-SONOSWDTX-00005648 at 646 (encouraging customers to buy Cast-enabled media players); GOOG-SONOSWDTX-00006022 -GOOG-SONOSWDTX-00006036 (encouraging customers to buy the Chromecast with Google TV); GOOG-SONOSWDTX-00005206 - GOOG-SONOSWDTX-00005208 at 208 (Google VP of Product Management encouraging customers to buy the Google Home Mini and the Google Home Max); GOOG-SONOSWDTX-00005229 - GOOG-SONOSWDTX-00005231 at 231 (Google General Manager encouraging customers to buy the Nest Hub Max, Nest Hub, Google Home, and the Google Home Max); GOOG-SONOSWDTX-00006122 - GOOG-SONOSWDTX-00006126 at 122 (encouraging customers to buy the Google Home Max); GOOG-SONOSWDTX-00006170 - GOOG-SONOSWDTX-00006171 (encouraging customers to buy the Google Home Max, Nest Mini, and the Nest Audio); GOOG-SONOSWDTX-00006172 - GOOG-SONOSWDTX-00006173 at 172 (encouraging customers to buy the Nest Mini, Nest Hub, Nest Hub Max, and the Google Home Max); SONOS-SVG2-00060380 -SONOS-SVG2-00060383 (enticing customers with "special offers" to encourage them to buy

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Cast-enabled media players); GOOG-SONOSWDTX-00005659 - GOOG-SONOSWDTX-00005662 (encouraging customers to buy the Chromecast (3rd Generation)).

Google also knows (or should know) that its actions will induce users of the Cast-enabled media players to directly infringe one or more asserted claims of the '885 Patent, and that users of the Cast-enabled media players directly infringe one or more asserted claims of the '885 Patent. For instance, Google supplies Cast-enabled media players while knowing the use of these Cast-enabled media players will infringe one or more asserted claims of the '885 Patent and that Google's customers then directly infringe one or more asserted claims of the '885 Patent.

Sonos reserves the right to revise, correct, add to, supplement, or clarify its response to this Interrogatory as additional information is discovered and/or becomes available.

INTERROGATORY NO. 16

Identify the particular portions, source code, or functionality of all accused applications for Android and iOS devices which Sonos contends meets, in whole or in part, one or more limitations of the Asserted Claims.

RESPONSE TO INTERROGATORY NO. 16

Sonos objects to this interrogatory as overbroad, unduly burdensome, and not reasonably proportional to the needs of the case insofar as it purports to require Sonos to "[i]dentify . . . all accused applications for Android and iOS devices"

Sonos also objects that the interrogatory is vague and ambiguous, particularly with respect to what is meant by "particular portions" of "all accused applications."

Sonos further objects that the term "Asserted Claims" have not been defined in the interrogatories. Sonos will interpret "Asserted Claims" to mean the asserted claims of the Asserted Patents in this litigation.

Sonos further objects to this Interrogatory as premature to the extent it seeks expert discovery in advance of the date set forth in the Federal Rules of Civil Procedure and/or the